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INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

HEARINGS

BEFORE THE

TEMPORARY NATIONAL ECONOMIC COMMITTEE

CONGRESS OF THE UNITED STATES

SEVENTY-SIXTH CONGRESS

SECOND SESSION

PURSUANT TO

Public Resolution No. 113 (Seventy-fifth Congress)

AUTHORIZING AND DIRECTING A SELECT COMMITTEE TO
MAKE A FULL AND COMPLETE STUDY AND INVESTIGA-
TION WITH RESPECT TO THE CONCENTRATION OF
ECONOMIC POWER IN, AND FINANCIAL CONTROL
OVER, PRODUCTION AND DISTRIBUTION
OF GOODS AND SERVICES

PART 17-18

PETROLEUM INDUSTRY

SECTION IV

OCTOBER 17, 18, 19, 20, 23, 24, AND 25, 1939

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II

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INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

TUESDAY, OCTOBER 17, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:35 a. m., pursuant to adjournment on Monday, October 16, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senators O'Mahoney (chairman), and King; Representative Williams; Messrs. Berge, O'Connell, and Brackett.

Present also: Representative Mapes (Michigan); Clarence Avildsen, representing the Department of Commerce; Quinn Shaughnessy, representing the Securities and Exchange Commission; W. B. Watson Snyder, Hugh Cox, F. E. Berquist, Christopher Del Sesto, special assistants to the Attorney General; Leo Finn and Roy C. Cook, Department of Justice.

The CHAIRMAN. The committee will please come to order. Mr. Ferguson, would you be good enough to be sworn? Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. FERGUSON. I do.

The CHAIRMAN. I may say as a preliminary, that the problem of petroleum in the public land States and in the Rocky Mountain region may be somewhat different from that in other parts of the country. The States as States, because so much of the petroleum resources are on public land, and because the Federal leasing law provides for a system of royalties to be paid to the Federal Government for use in development and reclamation, and for payment to the States to be used for schools and roads, have the interest of a land owner in the development of oil.

Then, of course, there is the interest which comes to any community from the industrial processes involved in refining crude petroleum. Finally, there is the interest which all the community has in the price which is paid for the finished product. The committee has invited Mr. Ferguson, who is the vice president of the Continental Oil Co., one of the principal operators in the petroleum industry in the West, to tell the story from his point of view. I understand that the Continental Oil Co. is interested in petroleum, in every phase of the entire industry from production to marketing. Is that correct?

Mr. FERGUSON. That is correct.

The CHAIRMAN. You are prepared to make your statement?

Mr. FERGUSON. Yes.

The CHAIRMAN. Would you please give your full name and position to the reporter?

TESTIMONY OF W. H. FERGUSON, VICE PRESIDENT, CONTINENTAL OIL CO., DENVER, COLO.

Mr. FERGUSON. My name is W. H. Ferguson. I am now and for more than 15 years have been executive vice president of the Continental Oil Co. My office is in the Continental Oil Building at Denver, Colo., and I reside in Denver. While I devote varying amounts of time to the business and activities of the company in other parts of the United States, the greater part of my time is consumed in general supervision of the activities of the Continental Oil Co. in the Rocky Mountain States. I do not profess to be a technical expert in any branch of the business, but I am reasonably well informed with respect to the course of the oil industry in all of its branches during the last 20 years in the Rocky Mountain States.

I was appointed and served as general chairman under the N. R. A. petroleum code for region No. 5, embracing the States of Utah, Idaho, Montana, Wyoming, and Colorado.

CONDITIONS PECULIAR TO THE INDUSTRY IN THE ROCKY MOUNTAIN STATES

Mr. FERGUSON. Now, I should like if the committee will permit me, to make a brief general preliminary statement outlining some of the conditions peculiar to the petroleum industry in the Rocky Mountain States. I believe such a statement will be helpful as a background to such questions and answers as may follow, if I may be permitted to go on with the statement.

THE CHAIRMAN. That will be quite satisfactory, Mr. Ferguson.

Mr. FERGUSON. If the so-called Mountain or Rocky Mountain States be regarded as including the States of Idaho, Montana, Utah, Wyoming, Colorado, New Mexico, and Arizona, they cover an area almost exactly equivalent to one-fourth of the area of the continental United States. If the State of Arizona be excluded as tributary to the Pacific coast trade area, and if the eastern part of New Mexico be excluded as falling more naturally within the trade area of Texas, then there is left approximately 600,000 square miles, or about one-fifth the area of the continental United States.

The present population of this vast area may be estimated on the basis of the 1930 census as between 3,500,000 and 4,000,000 people, or, roughly, the equivalent of the city of Chicago.

If Arizona and New Mexico be excluded, the population of the remaining five States of Utah, Idaho, Montana, Wyoming, and Colorado, is substantially less than the population of the city of Chicago.

From a trade standpoint the entire area may be roughly divided into that portion west of the Rocky Mountains, which is more or less subject to Pacific coast trade influences, and that part east of the Rocky Mountains which is more or less subject to the trade influences of the central United States.

Under the official census of 1930 there were only three cities in the entire area having a population of more than 50,000; Denver, Colo., 287,261; Salt Lake City, Utah, 140,267, and Pueblo, Colo., 50,096.

IMPORTANCE OF WYOMING AS AN OIL PRODUCING AND REFINING STATE

Mr. FERGUSON. The State of Wyoming is by far the most important oil producing and refining State in the entire area, although in recent years Montana has become increasingly important. According to the census of 1930, Wyoming had a population of 225,565. It ranked eighth in area among the States of the Union and forty-eighth in population. The State of Nevada was forty-ninth. The District of Columbia was included as a State in these comparative figures. Wyoming had a population of 2.3 persons for each square mile of territory. Cheyenne is the capital and largest city in the State, with a population approximating 20,000. Casper is the second largest city in the State, with a somewhat smaller population. Aside from these two cities I do not believe there are any other cities in Wyoming with a population as great as 10,000 people.

While these preliminary statistics are presented merely for the purpose of conveying some general idea of the nature of the mountain area, it must be quite apparent that in such a great expanse of territory so meagerly populated, the transportation facilities and transportation costs play a vital role in all business activities, including that of the petroleum industry.

Although a commercial oil well was drilled near Florence, Colo., in 1861, only 2 years after the Drake well in Pennsylvania, and although the early explorers in Wyoming encountered evidences of petroleum as early as 1832, and sales of oil were made from mountain seeps in Wyoming in 1863 by the Seminole Indians to emigrants going over the trail to California, the production of crude oil in any important commercial sense commenced with the discovery of oil in the Wall Creek horizon in the Salt Creek field in the year 1908, and the construction of a pipe line from the Salt Creek field to Casper in the year 1911. From the first discovery and development of oil and gas in Wyoming to July 1, 1938, the best available records show a total of about 8,000 wells drilled, of which number approximately one-half were drilled on public lands of the United States and the other half of State and patented lands. These drilling operations led to the discovery of 107 separate oil and gas fields; but all of them, except Salt Creek and the recent discoveries of deeper production at Lance Creek, were comparatively small and scattered over all parts of the State. Salt Creek has produced over 280,000,000 barrels of light oil and is still producing approximately 15,000 barrels per day. Its real development commenced with the construction of the pipe line to Casper in 1911 and proceeded very rapidly thereafter throughout the period of the Great War.

In 1922 the field was estimated to have a daily potential of 280,000 barrels. In 1919 the refinery at Casper of the Standard Oil Co. of Indiana (then Midwest Refining Co.), was refining about 60,000 barrels per day of crude oil and was one of the largest, if not the largest, refinery at that time in the United States. The Salt Creek field, at that time, was also the largest light-oil field that had ever been discovered. In the early 1920's the Texas Co. erected a refinery at Casper, as did the White Eagle Oil Co. (now Socony-Vacuum). Continental Oil Co. at the same time enlarged and modernized its refinery at Glenrock, Wyo., about 25 miles from Casper. There was also constructed at that period, a modern refinery at Parco on the

Union Pacific Railroad by the Producers and Refiners Corporation (now Sinclair Refining Co.), and Midwest Refining Co. (now Standard of Indiana), also acquired and enlarged a refinery at Graybull in the northwestern part of the State. The Texas Co. a little later constructed a second Wyoming refinery at Cody. These are the largest refineries now operating in Wyoming. Although there is a total of 52 refineries in the State, all producing and selling gasoline, most of them are skimming plants and dispose of their product in the local areas immediately surrounding the plants. However, even the largest refinery, which is that of the Standard Oil Co. of Indiana at Casper, now runs only 6,000 barrels of crude oil per day. The refinery of the Continental Oil Co. at Glenrock runs less than 3,000 barrels of crude oil per day.

The present total production of crude oil in the State of Wyoming is approximately 60,000 barrels per day. About half of the production is refined within the State and the balance is exported, either by pipe line or rail, or both, to other States, and refined there.

In 1938 the total consumption of gasoline in the State of Wyoming was 63,376,600 gallons. There was manufactured in the State more than 300,000,000 gallons; 244,569,000 gallons were exported to other States as follows:

Colorado	71, 432, 000
----------------	--------------

If I may be permitted, I will put these statistics in round numbers rather than carrying them to their conclusion.

The CHAIRMAN. That will be quite all right.

Mr. FERGUSON.

Idaho	13, 219, 000
Iowa	15, 798
Kansas	856

Senator KING. Thousand?

Mr. FERGUSON. No; just 856.

Minnesota	20, 700, 000
Montana	36, 000, 000
North Dakota	24, 000, 000
Nebraska	25, 000, 000
South Dakota	44, 000, 000
Utah	9, 600, 000

or a total of 244,569,305 gallons exported from the State as against the consumption within the State of 63,000,000 gallons.

The CHAIRMAN. Over what period?

Mr. FERGUSON. 1938, 1 year.

The CHAIRMAN. How does that compare with the trend over a number of years prior to 1938?

Mr. FERGUSON. I should say the consumption in the State of Wyoming has enjoyed normal increases over a period of years. So far as the exports from the State are concerned, I should say that they were very much larger in the earlier years when the refineries were operating at a very much higher rate than they are now.

The CHAIRMAN. That is the fact, is it not, that the total amount of gasoline exported from the State is considerably less now than it was a few years ago when the Casper refineries were operating at capacity, or near capacity?

Mr. FERGUSON. I think that is true.

Senator KING. Do your statements show the number of barrels of crude oil that were exported from the State?

Mr. FERGUSON. In round figures only. The total production of the State is a little over 60,000 barrels per day now, and about one-half of that, as nearly as I can ascertain, is refined in the State, and the other half is exported from the State.

Senator KING. Are the exports from the State of the crude oil increasing or diminishing?

Mr. FERGUSON. They are increasing. The reason for that I will try to develop as I go along.

The refining of petroleum products is by far the leading manufacturing industry of the State. According to the Census of Manufactures, United States Bureau of the Census, in 1937 the value of the products of all manufacturing industries in Wyoming was \$49,128,000, of which the refined products of petroleum amounted to \$29,993,000, or 61.05 percent of the total.

Senator KING. The greater part of that would be gasoline?

Mr. FERGUSON. Yes, sir.

Although oil refining is the leading industry of California, it represents only 12.28 percent of its manufacturing industry. In Louisiana petroleum refining is also the leading industry but represents only 21 percent of its total manufactured goods. In Oklahoma oil refining is again the leading industry but represents only 39 percent of its total manufacturing. In Texas it is also the first industry but represents only 43 percent of the value of all manufactured products.

These statistics are submitted merely for the purpose of showing the comparative importance to the State of Wyoming of its refineries and refining activities, and the necessity if the industry is to continue to operate at its present capacity of selling outside of the State approximately 80 percent of its refined products.

It will be observed from the tabulation showing the States into which Wyoming gasoline is exported that most of the products sold outside of the State must be sold in States to the east and south which also have available as a source of supply the entire Mid-Continent area.

Speaking generally in the other refining areas of the United States, such as the Mid-Continent, the Gulf Coast, Atlantic Seaboard, California, the refiner is able to add his transportation cost to market in arriving at his delivered price.

The CHAIRMAN. Before you enter that phase, may I ask you if you can state what refineries do the exporting of gasoline from the State?

Mr. FERGUSON. The refineries which do the exporting from the State are naturally the larger refineries which are operated by the major companies. The smaller refineries usually limit their capacity to the market available within a very narrow transportation radius.

The CHAIRMAN. Well, if I were to name them as the Continental, the Standard of Indiana, the Texas, and the Sinclair, would I name the companies which export practically all of the gasoline?

Mr. FERGUSON. You would if you add the Socony-Vacuum Co.

The CHAIRMAN. The Socony-Vacuum Co. also?

Mr. FERGUSON. Yes.

The CHAIRMAN. Where does the Socony-Vacuum operate?

Mr. FERGUSON. They have a refinery at Casper. It was originally built by the White Eagle Oil Co. and taken over by the Socony-Vacuum.

The CHAIRMAN. Do you know the capacity of that?

Mr. FERGUSON. I don't know the exact capacity of any of the refineries other than our own.

The CHAIRMAN. So that we have approximately six major companies which manufacture and export practically the entire amount of gasoline which is shipped out of the State of Wyoming?

Mr. FERGUSON. I think that is a correct statement, if you say practically the entire amount. There are small refineries that export from the State. For example, there is a refinery at Cody which belongs to the Husky Refining Co. I think it exports gasoline into Montana, and there are other refineries on the borderline of the State that export possibly into the Dakotas and into Nebraska. But I think your statement is substantially correct when you say that practically all of the gasoline exported is exported by the major companies.

The CHAIRMAN. The exportation of these small refineries is insignificant in the total picture?

Mr. FERGUSON. I think that is correct.

The CHAIRMAN. Now then, with respect to the exportation of crude oil for refining, what companies do that?

Mr. FERGUSON. Well, of course the producers of crude oil are both major companies and independents, and so far as crude oil is concerned in export, it would be difficult to segregate the crude oil of an independent producer or a major producer, or any other kind of producer. He sells his crude wherever he has a market, and sells it in the field, so it is immaterial to him where the purchaser may take it. I might say that the principal purchasers of crude for exportation, outside of the State, are the Standard Oil Co. of Indiana, which moves crude to Sugar Creek and Whiting; the Continental Oil Co. which moves crude to Denver; the Bay Petroleum Co. at Denver, which also purchases crude in Wyoming and moves it to Denver, and there are two other local refineries in Denver who buy Wyoming crude and move it into Denver.

The CHAIRMAN. What is the Bay Petroleum Co.?

Mr. FERGUSON. It is a refining company.

The CHAIRMAN. Major or minor?

Mr. FERGUSON. Well, I should say it would be classed as a minor.

The CHAIRMAN. It is an independent?

Mr. FERGUSON. It is an independent.

The CHAIRMAN. It is not affiliated with any of the integrated companies?

Mr. FERGUSON. No.

The CHAIRMAN. And the other two, what are the names of those?

Mr. FERGUSON. One is the Perry Refining Co., which is a small independent refinery in Denver. The other is the Oriental Refinery, which is a small independent refinery in Denver.

The CHAIRMAN. So that—

Mr. FERGUSON (interposing). I might finish. In addition to that there has been exported within recent months oil to Pocatello, Idaho, by the Idaho Refining Co., which is also a small independent refinery there. I do not think of any others, although there may be some.

The CHAIRMAN. So that without considering now the ownership of the oil when produced, practically all of the exportation of crude oil, like practically all the exportation of refined gasoline, is done by the majors?

Mr. FERGUSON. I should say the greater part of the exportation is by the major companies, except that the amount exported by the Bay Petroleum Co. should not be underestimated. They bring more oil into Denver to their refinery in Denver than the Continental Oil Co. brings into its refinery in Denver.

The CHAIRMAN. Where does the Bay purchase its oil?

Mr. FERGUSON. It buys its oil from independent producers in the Lance Creek field.

The CHAIRMAN. Does it have any production of its own?

Mr. FERGUSON. No.

TRANSPORTATION METHODS USED IN EXPORTATION OF PETROLEUM PRODUCTS FROM WYOMING

Representative WILLIAMS. In that connection, what is the method of transportation?

Mr. FERGUSON. The method of transportation now?

Senator KING (to Representative Williams). Of crude oil or gasoline?

Representative WILLIAMS. Both the crude and gasoline.

Mr. FERGUSON. The method of transportation for the crude oil exported from the State is now largely pipe-line transportation. There is a pipe line from the State running back to Freeman, Mo., which makes available Wyoming crude for a refinery near Kansas City and also for the refineries in Chicago. There is a pipe line constructed last year from a Wyoming field to Denver, Colo. Most of the oil exported is now moving by pipe line. Formerly it moved to a considerable extent by rail. It still moves to a considerable extent by rail from fields along the Union Pacific Railroad to the refinery of the Utah Oil Refining Co. in Salt Lake City, but the Utah Oil Refining Co. is now engaged in the construction of a pipe line from the Wyoming fields to its Salt Lake refinery.

Representative WILLIAMS. Who own these pipe lines?

Mr. FERGUSON. The pipe line running east to Freeman, Mo., is owned by the Stanolind Pipeline Co., a subsidiary of the Standard Oil Co. of Indiana. The pipe line running to Denver is a joint enterprise owned by Continental Oil Co. and C. U. Bay of the Bay Petroleum Co., and interests related to the Minelousa Oil Co. from whom Bay buys his crude in the Lance Creek field.

Representative WILLIAMS. Does anyone else use those pipe lines except the owners?

Mr. FERGUSON. The line east to Freeman, Mo., I believe is not used by anybody except the Standard Oil Co. of Indiana. The line to Denver is used not only by the owners but also by any independent refiner who desires to transport oil through it. For example, at the present time the Perry Petroleum Co. in Denver is transporting oil through it; the Oriental Refining Co. in Denver is transporting oil through that line. In addition to that the Idaho Refining Co. of Pocatello transports oil through the line to Cheyenne, and there loads it out by rail,

Representative WILLIAMS. Now, going to the gasoline transportation, is that done through pipe lines, too?

Mr. FERGUSON. There is no gasoline pipe line at all that I know of in the Rocky Mountain area.

Representative WILLIAMS. How is that transported?

Mr. FERGUSON. It is transported either by rail or by truck.

Representative WILLIAMS. Do you know what part of it is by truck, about, what relationship or percentage?

Mr. FERGUSON. I can't answer that.

I should say, however, that the greater part of it is still transported by rail from Wyoming.

Representative WILLIAMS. Is there any limit to the distance in which those trucks operate?

Mr. FERGUSON. Well, probably some sort of an economic limit that they are called upon to operate over, but I suppose a truck would go from the Atlantic to the Pacific coast if it had to.

Representative WILLIAMS. What is the practice, if you know, in that area?

Mr. FERGUSON. With respect to trucking?

Representative WILLIAMS. Yes; with reference to the area, the limitations, within a limit of 50, 100, 150, 200 miles?

Mr. FERGUSON. I should say that truckers in that territory frequently truck gasoline four or five hundred miles. For example, the entire eastern part of Colorado is subject to competition from the Mid-Continent area. That competition has grown to be mainly the competition of Mid-Continent gasoline being trucked into Denver and the eastern Colorado area from refineries in Kansas and Oklahoma, that average 450 miles distant.

Representative WILLIAMS. Are those by contract or common carriers, or how? I mean who owns the trucks?

Mr. FERGUSON. So far as I know, none of that trucking is done in trucks owned by the major oil companies. There may be some of it, but I have no recollection of any now and the volume would be inconsiderable, but trucking is done by two types of independent truckers: First, the public carrier type who charges a certain rate for the transportation, and, secondly, by jobbers who send their own trucks to the Kansas and Oklahoma refineries, buy the gasoline at the refinery, and truck it themselves in their own trucks to their own bulk plants and stations. You have the public carrier type of trucking, and you have the jobber trucking for himself.

Representative WILLIAMS. None of the companies, so far as you know, own their own trucking facilities or any subsidiary company of them operating a fleet of trucks for the transportation of gasoline?

Mr. FERGUSON. Not in the Rocky Mountain area. There may be some exceptions to that which do not occur to me now, but if there are—

The CHAIRMAN (interposing). Does the Continental do any trucking?

Mr. FERGUSON. The Continental does no trucking. If there are exceptions, they would be minor.

I would like to repeat, Mr. Chairman, the first part of this paragraph in order to tie it up with the last paragraph.

REFINING AND MARKETING IN WYOMING

Mr. FERGUSON. It will be observed from the tabulation showing States into which Wyoming gasoline is exported, that most of the products sold outside of the State must be sold in States to the east and south, which also have available as a source of supply the entire Mid-Continent area. Speaking generally in the other refining areas of the United States, such as the Mid-Continent, the Gulf Coast, Atlantic seaboard, and California, the refiner is able to add his transportation costs to market in arriving at the delivered price. The contrary is largely true in Wyoming. The farther Wyoming gasoline moves to the east or south into Colorado, the lower the price at which it must be sold in order to meet the competitive supplies from other sources. The State of Wyoming as a matter of long-continued State policy running through a number of State administrations when different political parties were in office has insisted upon the refining within the State of Wyoming of the crude oil produced in the State of Wyoming. There is a provision in all of the State oil and gas leases that the oil produced from the State land must be refined in Wyoming. A single refinery with modern cracking equipment running from 6,500 to 7,000 barrels per day will supply the entire consumption of the State of Wyoming. The maintenance of the refining industry, therefore, at its present level obviously compels the refineries to operate on average net-backs or to obtain at the refineries an average realization which they hope may exceed their costs. While each refinery in Wyoming has a different radius of distribution, both within and without the State, I should say that the average realization for 70-72 octane gasoline, at the larger refineries, would fall some place between 5 and 6 cents per gallon.

The cost of producing gasoline in Wyoming is higher than it is elsewhere in the United States, for a number of reasons, among which may be mentioned the large number of skimming plants, the higher wage scales, the small capacity of the refineries and the higher cost of raw materials largely because of transportation rates.

The business also is more seasonal than that of any other State of the Union. In 1937 gasoline consumption in Wyoming in the month of January was 3,278,000 gallons and in the month of August of the same year it was 8,400,000 gallons.

I might add by way of explanation here that the reason business is more seasonal in Wyoming than in any other State in the Union is not due solely to the weather, but a great part of Wyoming's gasoline business comes from tourists going through the State, to Yellowstone Park in the summer, which consequently raises the consumption in the summer to a very high seasonal level.

The CHAIRMAN. But the consumption within the State is only a small proportion of the production within the State, and the bulk of our gasoline is exported. Now what can you say about the swings in the market for that exported gasoline, which is more important in its effect upon refining?

Mr. FERGUSON. I had charts made up to show the seasonal variations of the entire territory in which we operate. I didn't want to lengthen the memorandum which I am reading by adding to the charts, but from those charts it would appear that in the territory to which Wyoming's gasoline is exported, seasonal variations are

much higher than the average of the United States. I refer to the States of North Dakota, Minnesota, Colorado, and other States where climatic conditions are not materially different from conditions in the State of Wyoming.

By way of illustration of seasonal variations, Continental Oil Co. has a service station at Cody, Wyo., one of the entrances to Yellowstone Park, which does a business during the winter months of about 2,500 gallons per month, and during the three summer months a business of about 25,000 gallons per month. These wide seasonal variations make it necessary for the refineries, if they are to operate evenly throughout the year so as not to disturb unduly continuous employment, to store during the winter months substantial excess quantities of gasoline in preparation for the high demand the following summer.

The carrying of such stocks involving tankage, shrinkage, insurance, taxes, and so forth, is an added element of cost to the manufacturer. The refinery employees in the larger refineries of the State work 36 hours per week and their average annual income in Wyoming is \$1,811.40, which is higher than any other State in the Union with the single exception of the State of New Jersey where the average annual wage of refinery workers is \$1,870.95. All other labor employed in Wyoming by manufacturing industries averages an annual wage income of \$1,375 against the average for refinery workers of \$1,811.

The cost of producing crude oil is considerably higher in the State of Wyoming than in many of the other oil-producing States with the possible exception of Montana. Casing and other heavy materials have to be transported longer distances at relatively high freight rates. The winters are frequently long and hard, interrupting and increasing the cost of operation. Most of the fields are isolated and remote from any town or railroad so that dwellings have to be erected for workmen, special school and hospital facilities furnished, as well as light, heat, and water. Royalties paid the United States are much higher than are customarily paid to landowners.¹

The ordinary costs of marketing petroleum products are also higher in the State of Wyoming than in any other State with the possible exception of Montana, Utah, and Idaho, where conditions are somewhat similar.

The Continental Oil Co. has 55 bulk plants in the State of Wyoming through which it distributes petroleum products over an area of 97,000 square miles. It is the largest single marketer in the State, although its total gallonage is less than 13,000,000 gallons per year, or approximately its sales in the city of Denver alone. The dealers in Wyoming are now very generally taking a margin which averages about 5 cents per gallon. Their business is very seasonal. There are approximately 1,300 licensed retail dealers in the State. They are largely dependent for their living upon the business of the three or four summer months. Consumption of gasoline in the State per registered motor vehicle is also relatively high. Because of the large number of bulk plants necessary to serve the State, the gallonage at each point is small. In order that the commission agent operating the

¹ See testimony and footnote 1, p. 9396, *infra*.

bulk plant may make a living, the rate of commission paid him must necessarily be higher to compensate for the small volume. The jobber operating in Wyoming usually receives a margin of 2.5 cents per gallon.

The CHAIRMAN. How does that compare with the margin paid in Montana?

Mr. FERGUSON. I think the margin in Montana today is about 3 cents, but I am not sure of it.

The CHAIRMAN. How about Colorado?

Mr. FERGUSON. I am coming to some comparisons. And unless he has only one bulk plant which he operates himself, he must pay out of his 2.5-cent margin a commission approximating on the average 2 cents per gallon to the commission agent operating the bulk plant and making deliveries to dealers, farmers, and other consumers.

The other one-half cent or three-quarters of a cent, depending on the commission agent's commission, must cover a return on his investment in the bulk plant, delivery equipment, inventory losses, credit risks, advertising, sales effort, insurance, and other items of expense. Compared to more populous areas in the East, the high jobber and dealer margins alone necessitate a higher consumer price of some 1.5 to 2 cents per gallon, depending on the points with which the comparison is made. In the State of Nebraska, for example, into which considerable Wyoming-made gasoline is shipped, the average dealer's margin is about 3.5 cents and the average jobber's margin is about 2 cents, which aggregate 2 cents less than the corresponding margins in the State of Wyoming.

I do not believe that anybody could successfully prove that any Wyoming jobber is making an excessive amount of money on his 2.5-cent margin or that any Wyoming dealer is getting rich, even if he takes a 5-cent margin.

The Wyoming State tax is 4 cents, and the Federal tax is 1 cent. The State tax is higher than in some other States, but it is also lower than a number of States. Frequently, however, comparisons are made between gasoline prices in Wyoming and some other State where the State tax is lower without due allowance being made for that difference in cost.

The Continental Oil Co. operates only one refinery in the State of Wyoming, which is located at Glenrock, Wyo., about 25 miles from the city of Casper. All of the refined products which we manufacture at Glenrock are shipped out of the refinery by rail. The average freight rate on gasoline to all of our bulk plants in the State of Wyoming is slightly less than 2.5 cents per gallon. About 70 percent of the output of the refinery is shipped into surrounding States where the freight rate to market is higher than 2.5 cents per gallon. Most of the small independent refiners make deliveries from their refineries by truck, and in many instances directly from the refinery to the dealer, short-circuiting the bulk plant which the larger competitors must maintain in order to maintain a State-wide service and to handle lubricating oils and greases, wax, and other petroleum products.

Truck transportation in the State of Wyoming is much cheaper than the prevailing scale of railroad rates. A considerable part of this transportation saving is passed by local competitors to the public in lower prices. The railroad rates on petroleum products into the Rocky Mountain area, both from the Mid-Continent and California,

are now receiving serious consideration by the railroads, who contemplate putting into effect drastic reductions to meet trucker competition, as they have already done in other parts of the United States. Similarly, intrastate rail rates from the Wyoming refineries must be reduced to meet trucker cost or it is inevitable that all the refineries in the State will be compelled to resort to deliveries by truck from their refineries. Such reductions, when made, should involve a material saving in transportation, which will undoubtedly be passed on immediately to the consumer because of the competitive forces at play.

There is a statute in Wyoming, as in many other States, which compels every refiner in the State to establish a base price at his refinery and to add the transportation cost as he moves out from the refinery to his price. The statute, however, specifically permits the refiner to sell at a lower price in any locality if necessary to meet competition either within or without the State.

I might say that there is some confusion in the Wyoming statutes pertaining to this matter, but I think without attempting to analyze and discuss it at length, the net effect of the statute is either to specifically permit the meeting of competition either within or without the State or to impliedly permit it by making the offense the selling at lower prices with the intent of destroying competition.

The Continental Oil Co. establishes a base price at its refinery at Glenrock, but is compelled to sell its products at many points in the State at prices substantially lower than its Glenrock price plus freight in order to meet local competition.

As above stated, there are 52 refineries in the State. Each has a transportation advantage within a local radius of distribution. As against this, the cost of manufacture of the skimming plants is relatively higher than the costs of those few refineries having modern cracking units.

The CHAIRMAN. What is the base price at Glenrock?

Mr. FERGUSON. We have a base tank-wagon price at Glenrock of 17.5 cents.

The CHAIRMAN. Well, the tank-wagon price is not what you ordinarily call base price, is it?

Mr. FERGUSON. We sell to jobbers in Wyoming because there is no spot market of any kind there, at a margin under our tank-wagon price, so all of our quotations at wholesale to jobbers are on the basis of 2.5 cents under our tank-wagon price at point of delivery.

The CHAIRMAN. Yes; but you make up that tank-wagon price by taking in certain factors, one of which is this base price of which you speak.

Mr. FERGUSON. Yes.

The CHAIRMAN. So that is what I was trying to determine. What is the base price at Glenrock?

Mr. FERGUSON. If you take the 2½-cent jobber margins from the 17½-cent price, you have a 15-cent price. If you then deduct the 5 cents for the State and Federal taxes you have a 10-cent base price at Glenrock.

The CHAIRMAN. In making response to the questionnaire, the Continental Oil Co. submitted certain typical methods of determining what the tank-wagon price is.¹ For example, you gave this method

¹ See Hearings, Part 14—A, p. 8128.

at Thermopolis, Casper basing price 9 cents, freight 1.35, State and Federal taxes 5, margin to cover marketing cost 3, making a total of 18.35 which resolved into a tank-wagon price of 18½ cents. So that at Thermopolis you took the Casper basing price of 9 cents. Now what is the comparable basing price at Glenrock?

Mr. FERGUSON. The basing price at Glenrock today would be 10 cents on a comparable basis.

The CHAIRMAN. Why would it be 10 cents at Glenrock and 9 cents at Casper, only about 50 miles away, both of them on the railroad?

Mr. FERGUSON. I think since that questionnaire was answered there has been a half-cent increase in prices in Wyoming that followed the increase generally by the Sinclair Co. all over the United States, so that would leave a half-cent to be accounted for.

The CHAIRMAN. Disregarding that increase, perhaps you could give the basing point or explain the difference between the two as of that date.

Mr. FERGUSON. The comparable basing point price to the answers to that question at Glenrock would be 9½ cents, and the reason we must base our prices on Casper when we go west and north of Casper is because the competitive basing point prices at Casper involve a freight rate differential against Glenrock of 0.36 percent, which we translate into the nearest one-half cent. In other words, we cannot sell west or north of Glenrock at a price higher than the Casper price, plus freight, because that is our competition; that is part of our competition.

I believe, Mr. Chairman, that there are a number of things of that sort which you will want to develop, and that it might be well to let me finish the statement I have, which is very brief.

The CHAIRMAN. Very well; that will be quite satisfactory.

Mr. FERGUSON. Because some of them are anticipated in this statement.

The volume and intensity of competition in the marketing of petroleum products in the State of Wyoming, both between the major company and the independents. and among the major companies and the independents, is not different in character or degree from that prevailing generally in other parts of the United States. If anything, the struggle for gallonage is more intense because of the large number of local refineries in proportion to the small total of available gallonage. There has been talk, at times, that the price of gasoline in Wyoming was based upon Mid-Continent, plus freight, and that the people of the State were therefore not receiving any benefit from their local crude supplies and refineries. I had occasion quite recently to make a comparison between what the prices would be at our 55 bulk plants in the State of Wyoming if based upon Mid-Continent, plus freight, and what they actually are. The study indicated that prices, at all the points in Wyoming where we operate, for Conoco Bronz-z-z gasoline (70-72 octane) averaged 2.24 cents per gallon lower than Mid-Continent, plus freight, and that our prices for our demand or lower octane gasoline averaged 2.48 cents per gallon lower than what is commonly referred to in Wyoming as the Oklahoma-plus basis.

It is a somewhat singular thing, but in conformity with the generally high standard of living in Wyoming, 80 percent of the gasoline which we sell in the State is either Conoco Bronz-z-z (70-72 octane).

or ethyl gasoline, whereas in Colorado, an adjoining State, only 73 percent of our total volume is Bronz-z-z and ethyl gasoline. It would seem that the people of the State, although afforded an opportunity to buy a somewhat lower octane gasoline at 2 cents per gallon cheaper, prefer to pay more and buy the premium products.

In July 1922 the retail price of gasoline to the consumer at Casper was 21½ cents. The date is July 1922. Today it is 22 cents for 70-72 octane gasoline and 20 cents for a lower octane gasoline which is, nevertheless, much superior to the only grade of gasoline available to the consumer in 1922. The dealer's margin in 1922 was 2 cents. Today the dealers in Casper are taking a margin of 4½ cents. In 1922 there were no State or Federal gasoline taxes in Wyoming. Today 5 cents must be added to the consumer price for State and Federal taxes. In spite of the increase of 5 cents in State and Federal gasoline taxes, and a 2½ cents in dealer's margin, gasoline of a comparable grade is sold at Casper today for 1½ cents a gallon less than in July 1922. In other words, in spite of an enormous improvement in the quality of the product, there has been a real decline over that period of 9 cents per gallon in price. This accomplishment, however, is wholly obscured so far as the public is concerned, by the increase in taxes and the dealer's margin.

The CHAIRMAN. Does the Continental in operating its own retail stations take the same dealer's margin that is taken by the independent?

Mr. FERGUSON. Continental does not operate any retail stations. I think it was about 1935 that we concluded to go out of the retail end of the business entirely. We had leased many of our stations in the smaller towns before that time, but at that time we completed our retirement from the retail end of the business. We no longer have any control over the dealer's margin at our stations or at our dealers' stations.

The CHAIRMAN. You have no company-operated stations in the Rocky Mountain region at all?

Mr. FERGUSON. We have no company-operated stations anywhere in the Rocky Mountain region.

The CHAIRMAN. You do have leased stations, do you?

Mr. FERGUSON. The stations which we formerly owned we have leased and they are operated independently by the lessees.

The CHAIRMAN. Do you own more or fewer stations than formerly when you were operating?

Mr. FERGUSON. In the Rocky Mountain States I do not believe we have built a service station for 6 or 7 years.

The CHAIRMAN. Have you purchased any?

Mr. FERGUSON. I would hesitate to say that we had not purchased a single station during that period, but our policy has been so strongly against doing so that I would doubt if we had purchased more than one or two.

The CHAIRMAN. Could you say whether or not you have more or less leased outlets than you had operated outlets when you were operating the stations yourself?

Mr. FERGUSON. We have less leased outlets, because we have abandoned a number of service stations due to changes in highways or other conditions of that sort.

The CHAIRMAN. Then the Continental is leasing fewer stations today than it operated formerly before the leasing plan was adopted?

Mr. FERGUSON. In Wyoming.

The CHAIRMAN. In Wyoming?

Mr. FERGUSON. I think that is correct.

The CHAIRMAN. And what is the fact with respect to Colorado?

Mr. FERGUSON. I think that would be the fact in Colorado.

The CHAIRMAN. And Utah?

Mr. FERGUSON. I think it would be the fact in Utah. In all of the Rocky Mountain States. I think we have constructed during that period a number of stations in other areas where we are marketing, tributary to the Great Lakes pipe line and areas in Virginia and the East, to furnish an outlet for our Baltimore refinery.

The CHAIRMAN. In answer to my question a moment ago you said that the basing price at Glenrock was, at the time this questionnaire was answered, 9½ cents. What goes into the determination of the basing price?

Mr. FERGUSON. In arriving at a basing price for our refinery at Glenrock we take into consideration the net back at the refinery on all the gasoline we sell, and we figure, so far as we are concerned, we must have a basing price of that amount in order to give us an adequate average netback on all of our business.

The CHAIRMAN. Now, by netback you mean the price which the refiner receives at the refinery?

Mr. FERGUSON. That is correct.

The CHAIRMAN. What relation does that have to the cost?

Mr. FERGUSON. The average netback, of course, has a very important relation to the cost, because if the average netback is less than the cost, you will lose money at the refinery.

The CHAIRMAN. Naturally.

Mr. FERGUSON. The Glenrock basing price is one factor contributing to the average netback, and to that extent is related to our cost and our hope for profits.

The CHAIRMAN. Now, I hope you have more than a hope in operating the refinery.

Mr. FERGUSON. Sometimes we have more than a hope, and sometimes we have less than a hope.

The CHAIRMAN. Well, the questionnaire which was submitted to the committee indicated that the cost per gallon at Glenrock was 4.87, something less than 5.

Mr. FERGUSON. That is for Conoco bronze gasoline?

The CHAIRMAN. Well, I didn't examine this questionnaire myself. Do you remember, Mr. Snyder, what that indicated?

Mr. SNYDER. They didn't indicate the brand. They said it was the cost of a gallon of gasoline at the refinery gate, exclusive of any selling expenses.

The CHAIRMAN. And what was the question?

Mr. SNYDER. Summary cost statement of each domestic refinery operated by reporting company or by its subsidiaries or affiliates for the year 1938, showing the principal elements of cost determining the cost of a gallon of gasoline and fuel oil separately at the refinery gate, exclusive of any selling expenses. They showed 4.87 cents; then if you add taxes and depreciation on a unit basis, that is adding

22 cents, makes a total of 5.09 cents, just slightly over 5 cents, including depreciation and taxes.

Mr. FERGUSON. With respect to that answer which I have probably seen but have no recollection of at this moment, I might express my personal opinion that all figures of costs in making gasoline of that kind are misleading and worth very little. For example, at Glenrock, we move our own Lance Creek crude through our own pipe line to the refinery. Due to the isolation of the Lance Creek field the price of crude oil in the Lance Creek field on the gravity basis is 33 cents a barrel less than it is in the Salt Creek field. It requires the lower price to equalize competitive crude prices. Now, if we charge our Glenrock refinery with Lance Creek at the crude field price of 33 cents a barrel less than the Salt Creek crude price, we are simply penalizing our producing department for the benefit of the refinery and so far as our producing department is concerned, we have yet in the Lance Creek field more than \$1,000,000 that we have failed to recover from our production there. I say that all statements of earnings of departments of an integrated company such as ours can be made anything you want to make it. We can determine what we transfer the gasoline to our marketing—

The CHAIRMAN (interposing). That is what the consumer sometimes thinks.

Mr. FERGUSON. Not as between departments. I am speaking as to the relative earnings as between departments. We could justifiably charge the Glenrock refinery with the Salt Creek price for its crude, in which event you would add to that figure I don't know how much, because I would attach little importance to that figure.

The CHAIRMAN. Well, then do you think that the committee should attach little importance to the figures given by the other companies operating in that area in response to the same question?

Mr. FERGUSON. I do, because I think the method of bookkeeping of every company answering that questionnaire with respect to the cost of making gasoline would be different from every other company. For example, what method do they employ in arriving at the cost?

The CHAIRMAN. The Continental gave three different answers for three different refineries. The Continental Oil Company at Glenrock reported the cost of 4.87; at Denver, 5.97; at Lewistown, Mont., 7.08. Now, there was some difference that went into the computation of those figures. Can you explain what the difference was?

Mr. FERGUSON. The difference at Denver is largely the transportation cost of bringing the crude into Denver. The difference at Lewistown would be due largely to the fact that it is a skimming plant without any cracking unit. But I could discuss for a longer period than I think you would want to listen to me, the misleading character of departmental figures of that sort.

The CHAIRMAN. What is the price of gasoline, or what was the price of gasoline at Glenrock at the time this questionnaire was answered, approximately?

Mr. FERGUSON. You mean the retail price?

The CHAIRMAN. The retail price.

Mr. FERGUSON. 22 cents.

The CHAIRMAN. And what was the retail price of gasoline at Denver at that time?

Mr. FERGUSON. I think it was about 20 cents.

The CHAIRMAN. So that the consumers in Denver, with the cost as reported by the Continental, 1.10 higher than the cost at Glenrock, were paying 2 cents less a gallon than the consumers at Glenrock.

Mr. FERGUSON. Well, without—

The CHAIRMAN (interposing). Now, that is one of the curious facts which develop in any survey of the oil industry which causes all the uncertainty in the public mind with respect to the price structure.

Mr. FERGUSON. I appreciate that thoroughly and have been called upon a number of times to explain our method of operation, which produces that result.

The CHAIRMAN. Well, how about the method of accounting?

Mr. FERGUSON. Well, as far as our total accounts are concerned, we know whether we are making something or losing something, but as to the division in the departments of those results, I say they are misleading; but to answer more directly your question, I appreciate the difficulty in explaining to the public that gasoline made at Glenrock should sell for a higher price than gasoline made at Glenrock sells for in Nebraska.

The CHAIRMAN. You may be interested to know, Mr. Ferguson, that half of the members of this committee who have at one time or another been tourists in Wyoming have been asking me that same question, and I have found it very difficult to explain.

Mr. FERGUSON. Now, my explanation of it—it is the real explanation—is that the natural resources of the State of Wyoming are out of all proportion to the home market. Its refining industry, processing more than 30,000 barrels per day, is very much larger than the home market can possibly consume. The reason for that is, to a considerable extent, historical. When the Great Salt Creek field was opened up and when the refinery of the Mid-West Refining Co. was running 60,000 barrels per day of crude oil, we were in the midst of the Great War. There was an insatiable demand for petroleum products from every quarter. They were shipping gasoline from Casper to California; the Los Angeles basin fields had not yet come in.

They were shipping a trainload every day to Baton Rouge to be exported to England, and they were needing the product from Casper to meet the demands in Iowa, Illinois, and Indiana. Under those conditions Wyoming developed a refining industry out of all proportion to what the economics of the home market would have required. By way of illustration, the State of New Mexico has developed a large production along its eastern border. It never thought of refining all of that oil in the State of New Mexico, which is a large State thinly populated.

The pipe lines were immediately extended from West Texas into the area and took the production to the Gulf where it was available for the consumption of the Atlantic seaboard. Now starting with the over-built structure of the refining industry at the time of the war, the trade area for Wyoming refineries has gradually contracted as the production of the Salt Creek field declined, but still the people of the State, having enjoyed the activity and prosperity and employment of a large refining industry, are extremely reluctant to see it dwindle down to the point that would be justified by basic economic conditions. They still want a large refinery or refining industry—it is the largest industry in the State today, and they can only have a large

refining industry by permitting those refineries to operate on average netbacks.

When they take gasoline into Colorado it isn't what they should get for it, it is what the price is in Colorado and they have to sell it at that price, and that is determined by the Kansas and Oklahoma prices, plus trucker transportation, and they take it into Nebraska where it isn't a question of trying to get a higher price; they have to take the competitive price in Nebraska. And when they get all through they try to take some advantage of their location. They put together all the competitive forces and they hope in the local market and in the foreign market to get for their gasoline an average netback at the refinery which will exceed their costs of production.

Now by way of illustration, take other industries in the area. You have the great beet-sugar industry. Beet sugar is sold in Wyoming for much higher prices than it is on the Mississippi River where it encounters competition from Cuba. The steel industry at Pueblo, Colorado, and I presume in Utah, sells its steel in Pueblo or Denver for higher prices than it does in California.

The CHAIRMAN. But the refining of beet sugar is increasing in Wyoming and in other western States, rather than decreasing?

Mr. FERGUSON. They can increase the refining of sugar in Wyoming so long as their cost of refining that sugar does not exceed the price they are able to obtain in an extended market. In other words, if the production of sugar in Wyoming today can all be marketed west of the Mississippi River, that is one thing. If they enlarge that industry and have to go east of the Mississippi River with their sugar, then one of two things must happen, they must either cut their costs of production and manufacture or they must pay the farmer less for his beets, and the same thing is true of the oil industry. In Wyoming if the oil industry is to expand and refine more crude oil in Wyoming, they will have to cut the cost of the crude to the producer, on the one hand, or they will have to devise methods of lowering their production costs to dispose of the additional product.

Take the canning industry in that western country. The canneries in Colorado sell their canned goods in Colorado for more than they do on the Pacific coast. Now the farmers want them to operate at as great a capacity as possible and if they operate at that capacity they have to go out of the home market to get rid of their product. In Wyoming if refining capacity was cut from 30,000 barrels to six or seven thousand barrels, what would become of the crude?

The crude oil would have to be exported from the State through pipe lines in an increasing quantity or else the production of the State would have to be so curtailed that the employment of labor and capital would be seriously impaired.

The CHAIRMAN. Now do I understand you to say that the Continental does not segregate in its accounting the activities of the various departments of the industry?

Mr. FERGUSON. Oh, yes; we segregate them solely to convey some idea to the executives as to what each department is doing.

The CHAIRMAN. In other words, your executives know what your producing department is doing, what your transporting department is doing, what your refining department is doing, and what your marketing department is doing?

Mr. FERGUSON. If you know enough about the business to interpret those accounts; yes. But if you don't, those accounts mean nothing. May I give you an illustration?

The CHAIRMAN. Well, I assume that the executives know enough about the business to interpret the accounts and also to explain the accounts to lay persons.

Mr. FERGUSON. Well, I know enough about some accounts to interpret them properly, but there may be others with which I am not so familiar and which mislead me.

The CHAIRMAN. I will gamble on your ability to interpret them.

Mr. FERGUSON. For example, just by way of illustration, we have maintained the price at our refinery at Denver of Mid-Continent plus railroad freight.

The CHAIRMAN. From where?

Mr. FERGUSON. From any point in the Mid-Continent, any point in group 3. That was our tank-car price until the trucker competition became so great.

The CHAIRMAN. Then do I understand this correctly, that in Denver you maintain the Mid-Continent price plus freight, the group 3 price, plus freight to Denver? That was the Denver price?

Mr. FERGUSON. That is right because a large part of the gallonage consumed in Colorado must come from Kansas and Oklahoma. There is no gasoline that I know of moving into the Rocky Mountain area at Mid-Continent plus freight, or California plus freight over in the Idaho territory, except in areas where they have to go to California or Oklahoma or Kansas to get part of their supply. But I was illustrating, if I may, this question of accounting. We credit our Denver refinery as against the marketing department with a price of Mid-Continent plus 3.37, the railroad rate. Our marketing department can't get the Mid-Continent price plus 3.37 a gallon; it must meet the trucker competition, so it drops its price 75 hundredths of a cent to try to hold some of the jobber business we have. That isn't low enough but we try to hold what we have.

The refinery there gets full credit for the Mid-Continent price plus freight and the marketing department is running at a huge loss. Now, we will change that eventually, but in the meantime it is only a departmental account anyway—what difference does it make? We say that to ourselves, and if the railroads are going to reduce their rates to the trucker level in that territory, why not wait before adjusting the departmental accounts until that permanent change takes place? I only mention that by way of illustration.

The CHAIRMAN. Now, as I mentioned the price of crude a moment ago, and it occurred to me as I listened to you that the Continental Oil Co., as an integrated company, was actually in much the same position as the State of Wyoming as a community, because you are interested in the price of crude, you are interested in the profits of refining, and you are interested in the profits of marketing. The people of the State of Wyoming are interested in the price of crude, because of the landowners; their schools receive a definite and substantial income from the royalties that are paid for the development of the public land. Now, does the Continental attempt to make any balance or does any operating company of an integrated character attempt to make any balance among these various departments? You are interested, for example, in maintaining the price at which you

sell your finished product. Are you interested equally in maintaining the price of the crude oil or would you like to see the price of crude oil drop?

Mr. FERGUSON. We would like to see the price of crude oil go up because we are producers of crude oil in Wyoming on balance.

The CHAIRMAN. That is right.

Mr. FERGUSON. In other words, we produce a great deal more crude oil in Wyoming than we refine. So far as our marketing prices are concerned, they are largely out of our hands; they are controlled by competition. We have to sell in the various towns in Wyoming for the competitive price and if we should attempt to raise the price in order to make more money we couldn't do it. Now our interest is a little different, Mr. Chairman, from the interests of the State of Wyoming alone in this respect. If we reach a stage in the State of Wyoming where we can't make money, we can always curtail that losing operation in Wyoming and supply Wyoming from some other source, a thing that might well happen to the refining industry in Wyoming if it couldn't make money operating at the present levels.

It could curtail its refining activities so as to supply the State only or the State and some nearby territory, and then supply the other territory, which is now being supplied from Wyoming from some other source of supply. But aside from that distinction, because we are both in and out of Wyoming, I should say our interests are not very different from the interests of the State.

The CHAIRMAN. Well, now what is the trend of the price of crude in this Rocky Mountain area?

Mr. FERGUSON. So long as the refining industry is maintained at what might be said to be uneconomically high levels, the tendency will be for the price of crude to go down in order to absorb excess transportation.

The CHAIRMAN. Now what do you call uneconomically high levels?

Mr. FERGUSON. Well, I should say that Wyoming today is refining more crude oil than under normal conditions would be refined with such a small local market.

The CHAIRMAN. Well, what is the tendency generally in the oil industry toward refining at the point of production?

Mr. FERGUSON. I think the history not only of the oil industry but of nearly all manufacturing businesses will indicate that manufacturing establishments are better located in the center of great markets. In the oil business you can move crude whether by pipe line or rail, more cheaply than you can move refined products. If you move your raw materials to the center of a great market you don't have as much to pay by way of transportation in the distribution of your product. Now if you attempt to locate refineries for example in Wyoming at the source of the raw material in the Lance Creek field and the Salt Creek field, you couldn't employ a gasoline pipe line to take the gasoline to the various markets now served because you would have in addition to the gasoline at least 50 percent of the barrel of crude left in fuel-oil distillates, kerosene, asphalt, road oil, and other materials that could not be moved by pipe line, or the same pipe line.

The CHAIRMAN. Well, was that circumstance understood by those who built the P. & R. refinery at Parco and those who built the Texas refinery at Cody?

Mr. FERGUSON. At that time production had not developed in Kansas and Oklahoma to the present extent. That was immediately following the war period, and Wyoming gasoline was necessary to supply the demand of that eastern territory. Therefore, those refineries could operate and sell their product profitably without difficulty, but as soon as sources of crude supply grew up in the Mid-Continent area and the Chicago district the trade area of Wyoming was limited, and if those same companies were called upon to make a refinery investment in Wyoming I think it would be on a much smaller scale.

The CHAIRMAN. What is the difference, if any, between the conditions under which the petroleum industry must operate in Wyoming and the conditions in Colorado, Montana, and New Mexico?

Mr. FERGUSON. Well, as I indicated in my opening statement, if you have a refinery in the Mid-Continent field or the Gulf Coast or the Atlantic Seaboard, you manufacture gasoline and you add the cost of transportation from the refinery to the delivered price at the point you supply. For example, take all of the quoted prices in the journals, Mid-Continent, Gulf, Atlantic Seaboard, they are base prices at those primary markets, and you can sit down with a pencil and figure what the price is at a point 100 miles away or 200 miles away. You simply add the freight. Now when you locate refineries in Wyoming of a capacity which necessitates the exportation of 80 percent of all the gasoline made in the State to distant points where the markets are lower, instead of adding the freight rate to your Glenrock base price, you don't go very far until you have got to take a lower price, and still a lower one and still a lower one.

The CHAIRMAN. Because of the proximity to those other markets of other sources of supply.

Mr. FERGUSON. Correct.

The CHAIRMAN. What is the effect upon the industry and the price of crude, and the price of the finished product to the consumer, of the building of pipe lines and the transportation of the crude to distant refineries for processing?

Mr. FERGUSON. I should say the public in Wyoming, if properly advised, would welcome the construction of pipe lines and an enlarged market for their crude-oil production. There are dislocations that we all regret in connection with any change of methods of doing business. There would possibly be some diminution in railroad employment due to the use of pipe lines instead of the rails to transport crude, but for the long run the State of Wyoming, rich in natural resources, with 14 oil fields shut in entirely, should welcome any instrumentality that would enable them to get their raw material to market.

In the Rocky Mountain States, what are the markets? There are only two cities in the Rocky Mountain States where you can afford to transport crude any great distance; one is Denver and the other is Salt Lake City. They are the only two areas that have a sufficiently large local market to justify a high cost of transportation for the raw material.

The CHAIRMAN. What is the effect on the independent producer of the construction of pipe lines?

Mr. FERGUSON. The independent producer is enormously benefited by having a market for his oil that he would not otherwise have.

The CHAIRMAN. You and I were present at a hearing in the Department of the Interior within a month or so, at which the question of what price should be fixed for Government royalty in relation to the price being paid for oil as a result of the contract made by some of the large producers in connection with the new pipe line was the subject of discussion.¹ If I remember correctly, the Interior Department had issued an order fixing the price for royalty oil at \$1.14, but the contract to the new pipe line was fixed at 77 cents, was it not?

Mr. FERGUSON. Yes.

The CHAIRMAN. The independents contended that that had the effect, or would have the effect, of reducing the income which they would receive from their crude oil below the point which should be maintained.

Mr. FERGUSON. Well, of course, as I said in that hearing, nobody likes to make a 6-year contract for the sale of petroleum. Nobody is wise enough to know whether they have made a good contract or a bad one, on either side of the deal. The contract to which you refer was a contract to sell the Utah Oil Refining Co. for transportation to Salt Lake City crude through the pipe line which the Utah Oil Refining Co. was then projecting. The producers of crude in the field and the Utah Co. dealt at arms' length; the negotiations were quite protracted and quite heated. When they were over the Utah Co. agreed to pay the present field price until July 1, 1941, and to pay 13 cents a barrel more than that after July 1, 1941, and they said they couldn't possibly afford to build a line to afford this additional outlet for the field without some assurance for a length of time that they had to have to amortize an investment of four or five million dollars. Now, whether the independents would have made a better deal or whether we made a poor deal and the Utah Co. a good deal or the Utah Co. a poor deal and we made a good one, I think, Mr. Chairman, is in the lap of the gods. Six years is a long time.

The CHAIRMAN. What would be the final effect of such a trend upon the price of crude oil? It would be to lower that price, would it not?

Mr. FERGUSON. I think normally it would be to lower the price, but I think the construction of the pipe lines affording a cheaper means of transportation to distant markets tends to offset that. If the crude had to be transported out of the State by rail as heretofore, I think the crude would have to take some adverse differential in order to absorb that cost.

The CHAIRMAN. You intimated a moment ago that there was some prospect in your opinion of a reduction of the freight rates on gasoline. On what do you base that opinion?

Mr. FERGUSON. The entire freight-rate structure on petroleum products all over the United States is in a condition of what might be called flux, due to trucker competition, and also possibly barge competition and pipe-line competition, but so far as Wyoming is concerned it is principally interested in the trucker phase of that competition.

The railroad companies have been maintaining scales of rates on refined petroleum products that are so much higher than the cost of transporting such products by truck that the railroads have simply

¹ A hearing on appeal of certain producers from the price set by the Secretary of the Interior for oil produced from Government-owned fields.

been losing most of the business. They now propose to put into effect what might be called almost revolutionary adjustments from Oklahoma and Kansas into the Rocky Mountain area, which, of course, must be followed by similar adjustments within the area.

The CHAIRMAN. You say they propose to do that. How was that proposal made?

Mr. FERGUSON. I perhaps shouldn't speak for the railroads, but I have spoken with the railroad people often enough to know that the railroads are trying to get together some kind of a scale that they think will be fair to all. They have been a long time at it. We are a little impatient about the length of time they are taking, but I think they will eventually arrive, and very soon.

The CHAIRMAN. Well, where are the negotiations at the moment?

Mr. FERGUSON. With the railroad companies, so far as I know.

The CHAIRMAN. You know of no proposal to the Interstate Commerce Commission?

Mr. FERGUSON. If you consider the Rocky Mountain area as a whole, a very drastically reduced rate was filed from Portland, the Pacific coast, into southern Idaho, and in the Spokane section. That has been suspended, as I understand it, by the Interstate Commerce Commission on the protest of the truckers, who contended the railroads have come below the trucker cost. There have been new rates published in Nebraska and Kansas, but so far as the interstate rates from group 3 into the Rocky Mountain territory are concerned, I think no new rates have yet been filed with the Interstate Commerce Commission.

The CHAIRMAN. How about intrastate rates in that area?

Mr. FERGUSON. The intrastate rates naturally would be adjusted following the adjustment of the interstate rates, but I think that if the railroads delay too long there will be an adjustment of intrastate rates due to the oil companies going to trucking and not waiting for them. I might say there, Senator, as an interesting item in the Wyoming situation, the capacity of Wyoming refineries is largely determined by the amount of fuel oil they can dispose of. There is no fuel-oil market except to the railroads. There has been some delay in going to trucking in Wyoming, not due to any agreement with the railroads or any discussion with them, but we know that if we go to trucking out of refinery they will lose so much traffic that they can't consume as much fuel oil as they are consuming in handling that traffic and we will get into that vicious circle.

One of the largest items of freight in Wyoming is the handling of refined petroleum products out of those refineries. Now if that is taken away from the railroads, no matter how much they might like to buy our fuel oil, they simply won't need it. That factor has to be considered there.

The CHAIRMAN. Of course, you are not in position to express an opinion as to what is likely to be done about this freight-rate reduction.

Mr. FERGUSON. You mean whether such a reduction is to be made?

The CHAIRMAN. Yes.

Mr. FERGUSON. I am perfectly confident it will be made. If it isn't made the railroads might as well go out of the business of hauling petroleum products entirely.

The CHAIRMAN. Is the marketing of gasoline and petroleum products conducted at a profit in the Rocky Mountain area?

Mr. FERGUSON. That again involves the question of departmental accounts. I should say, generally speaking, the profit, if any, is a small one.

The CHAIRMAN. There was testimony here some days ago to the effect that the large integrated companies, such as the Continental, make profits in the production and in the transportation of oil but suffer large losses in refining and marketing, and the statement has been made that the refining and marketing operations are not segregated in the accounting procedure in such way as to make it possible to tell which one contributes the largest amounts to that combined operation.

Mr. FERGUSON. Well, I think that involves, as I said, the difficulty of departmental accounting. A company that has its own crude-oil production, its own refineries, and its own markets, can make any one of those departments make or lose, depending on the method of bookkeeping. We call the transfers from one department to another transfer prices. Now, whether the refinery makes money or not would depend upon what we elect to transfer our crude production to the refinery for. Whether the marketing department would make money or not would depend largely upon what we elected as a matter of bookkeeping to transfer our products from refinery to marketing.

I again say that I think all departmental figures of integrated companies are likely to be very misleading and not comparable one company with the other.

The CHAIRMAN. Can you speak for the Continental?

Mr. FERGUSON. The way we keep our books we sometimes make money in marketing in the Rocky Mountain States and sometimes we do not. We have not for the last year. That is the way we keep our books.

The CHAIRMAN. How do you make your reports to your stockholders?

Mr. FERGUSON. We report the over-all results of the company as a whole.

The CHAIRMAN. And the over-all result of the company as a whole for a number of years has been profitable or unprofitable?

Mr. FERGUSON. It has been profitable, although in 1932, which isn't so long ago, I think we lost \$11,000,000. Last year we made a little over a dollar a share, which we would think on the total investment we have in the business would be a very small earning, I should say not more than 2 or 3 percent.

The CHAIRMAN. What is the effect upon the independent refiner of the operation of the integrated company by and large?

Mr. FERGUSON. Well, of course each independent refiner would be confronted with a different set of circumstances. But I say this: While I have no statistics to support the statement, while I don't know much about the rest of the United States, I feel very confident that in the last 15 years there has been an increase in the Rocky Mountain territory of independent producers, independent refiners, independent jobbers and dealers, out of all proportion to the increase in total business. If the effect is adverse there are apparently a lot more of them that want to try it.

The CHAIRMAN. What is the trend of the petroleum industry with respect to the proportion of the retailing business which is carried on by independents? I am not classifying the lessee operator as an independent.

Mr. FERGUSON. You are not talking about dealers generally, are you?

The CHAIRMAN. Yes; I am talking about dealers generally.

Mr. FERGUSON. I should say the tendency definitely is to turn over the retail end of the business to the independents. With respect to the jobber who buys in tank-car lots, a wholesaler in the business, I can't express an opinion with respect to the United States as a whole.

The CHAIRMAN. I am just talking about the Rocky Mountain area.

Mr. FERGUSON. In respect to the Rocky Mountains there has been a constant increase in the number of independent jobbers operating in that territory, a proportionate increase in the product which they sell as against the major companies.

The CHAIRMAN. How did that compare with the increase of the number of outlets of the major companies?

Mr. FERGUSON. Again, if you are speaking of retail outlets—

The CHAIRMAN (interposing). I am. I am talking now of filling stations rather than bulk plants.

Mr. FERGUSON. I would hesitate to answer that question in the locality with which I am more familiar other than the city of Denver where I live. I should say that there have been more independent service stations constructed in the last 6 or 7 years than there have been service stations constructed by the major companies.

The CHAIRMAN. The picture that I get from your testimony is that of an industry, particularly as applied to Wyoming, in which the bulk of the crude oil is sold to the major companies, the bulk of the crude oil is either refined or transported out of the State by the major companies, and the bulk of the gasoline which is manufactured in the State is manufactured by the major companies, sold in the State and exported out, so that we have a petroleum industry which is dominated by the major companies, and I am curious to know what your opinion is as to the effect upon the public interest, and the public interest of course is just as diverse as the interests of the integrated company. What is the effect of it upon employment within the State as well as the effect upon the price which the consumer has to pay?

Mr. FERGUSON. That of course is a rather large question that I would much prefer to think about longer than I can at this moment before answering, but—

The CHAIRMAN (interposing). Let me interrupt to say this. We see clearly that this industry is carried on by agencies which have been brought into existence outside of the State of Wyoming. Now what is true of Wyoming is true everywhere. This industry and many other businesses are conducted by corporations which actually are not subject to the jurisdiction of the community in which they operate to any effective degree.

Mr. FERGUSON. I should say in answer to your question—and I would myself appraise my answer as being worth very little—in the first place, the independents in the oil business are not dominated in any sense that I am conscious of by the major companies. In

the area with which I am familiar, as I have said, more and more of them are coming into the arena, and I think making money. Many of them I know, and they seem to be getting along pretty well.

Now as to the effect on employment, both of capital and labor, it is hard for me offhand to see that the total of employment would be any less, or possibly any greater, if the business is largely done by major companies or by minor companies. The crude oil has to be produced, it takes so many men to do it; the product has to be refined, it takes so many men to do it; it has to be distributed, and I can't see that the total employment of labor would be very different whether the business is conducted by independents or major companies.

The CHAIRMAN. What is the effect of this upon the control of prices, or the price structure?

Mr. FERGUSON. I think there is very little control of prices or price structure except by some of the most strenuous competitive forces that exist in any business today.

The CHAIRMAN. Do you testify that there is complete competition in the sale of crude oil?

Mr. FERGUSON. Yes. If anybody would come along and offer us more for our crude than somebody else, they can have it, but in the purchase of crude oil the competition is necessarily different from the competition surrounding a service station. It is a different type.

QUESTION OF COMPETITION OR PRICE LEADERSHIP IN MARKETING IN ROCKY MOUNTAIN AREA

The CHAIRMAN. How about the competition at the service station?

Mr. FERGUSON. I should say the competition at the service station is complete, 100 percent.

The CHAIRMAN. What is the story about price leadership, so-called? I ask you that question with the thought in the back of my mind that the Continental is regarded as the price leader in this area.

Mr. FERGUSON. I think the Continental Oil Co. is regarded as the price leader in the Rocky Mountain States, and if we had anything to do about the matter, we would like to retire from that position.

The CHAIRMAN. How did you acquire that position?

Mr. FERGUSON. The only way we acquired it, if we ever had it, was because we happened to be the largest single marketer of petroleum products in each of the States, although I think in Montana today the Texas Co. markets more than we do. But as I see this matter of price leadership, if we reduce a price we are real leaders because we market so much of the product that the other companies have to come down to our level. If we attempt to raise a price, we are becoming less and less leaders of anything. Every time we have raised a price in the past 2 or 3 years, it has been an experiment, and I am not so happy about the results of those experiments. We frequently had to drop down and down again to the old level.

The CHAIRMAN. You have occasionally tried to raise the price, though?

Mr. FERGUSON. Oh, yes.

The CHAIRMAN. How does it come that a company like Socony-Vacuum will go into a State like Wyoming and purchase a refinery

set-up and follow the leadership of the Continental in the retail price? And how does it come that the Standard of California will come into the State and establish service stations and follow the price of the Continental? If there were real wide-open competition, would not the tendency be for those companies to try to take the gallonage away from you and drop below your price?

Mr. FERGUSON. I am not sure that they do follow our prices. If the word "price" be looked at in a large way, they may be making concessions of one kind or another to get business away from us that are the equivalent of price. At any rate, I have heard many, many complaints of that kind from our marketing people. If they go out openly and cut price and they are sufficiently important in the market, everybody will drop down to that level to meet them and they haven't gained anything, but sometimes they do the equivalent of cutting price by loaning equipment or something of that sort, which we don't do now, but competition in those lines is becoming so severe, how long we can stay out of it I don't know.

The CHAIRMAN. There has been considerable testimony here from which one might draw the conclusion that there wasn't a great deal of price competition among the majors, and therefore among others also, but that the principal methods of competition had to do with secret concessions and loaning of equipment, and the improvement of filling stations, and the like. Does that exist in the Rocky Mountain area?

Mr. FERGUSON. I think that there is competition there and elsewhere in the United States with respect to price. It is going on all the time. You can't go into a city, a town, in Wyoming where you can't buy gasoline at different prices. Sometimes the competition is between the majors and sometimes between the independents themselves, or between majors and independents, but the reason there is not more competition in price, as I see it, is that if anybody attempts to compete on an open-price basis and they are sufficiently important, everybody else will immediately drop down to that price. Prices always tend to level themselves off in a competitive situation.

The CHAIRMAN. What about the exchange of gasoline at the refineries?

Mr. FERGUSON. In Wyoming?

The CHAIRMAN. Yes; and anywhere, in your experience.

Mr. FERGUSON. Well, I think it is a natural method of saving transportation.

The CHAIRMAN. I understand, for example, that the Standard of California sells under its own brand in Wyoming at its filling stations the gasoline refined by Sinclair at Parco.

Mr. FERGUSON. In that particular case, the Standard of California opened up an oil field at Medicine Bow. The refining capacity of Wyoming was already overdone in their judgment. The Sinclair Co. had some unused capacity. The California Co. deliver their crude to the Sinclair Co. and pay them for processing it according to their specifications, so that when it comes out of there, I presume it is the same type of gasoline that the Standard of California markets elsewhere, or at least have elected to market in that territory.

We have no exchanges of gasoline that are not based upon specifications. If the particular product isn't already in line with our speci-

fications, we would insist that a different type of product be made, or else we ourselves would reform or reprocess it.

The CHAIRMAN. Do you exchange gasoline?

Mr. FERGUSON. Yes; we have exchanges.

The CHAIRMAN. And am I to understand that it is never exchanged except upon the basis of particular specifications?

Mr. FERGUSON. Never. If the product happens to approximate our specifications anyway, so that the modification would be a very slight one and immaterial to its value, we might make an exchange without insisting on a change in the specifications, but I have negotiated for several exchanges which have fallen down because we were unwilling to satisfy the other company as to their specifications and they were unwilling to satisfy us.

Mr. O'CONNELL. May I ask a question? I was quite interested in what you had to say about price and the fact that under an open price system there is really no advantage in reducing a price because the other suppliers will almost immediately meet the price, so that you have gained no advantage in terms of your gallonage. In terms of your company, which is apparently a very large marketer in the Rocky Mountain area, what would induce you to lower price?

Mr. FERGUSON. Competition from all sources.

Mr. O'CONNELL. You mean someone else has first lowered the price?

Mr. FERGUSON. Yes; or we will lower it ourselves. If the price of crude should go down or any basic change in condition take place, we would lower the level of our whole market.

Mr. O'CONNELL. For what purpose? Not to meet competition?

Mr. FERGUSON. That in a sense would be to meet competition because if the price of crude goes down, the price of gasoline always goes down with it, it has to.

Mr. O'CONNELL. Don't you mean then if you did not lower your price, someone else would and you would ultimately be forced to? What I am getting at, is there any point from the point of view of your company to first lowering a posted price, or isn't it ordinarily a result of undercutting, secret price cutting, that sort of thing which you, in effect, meet?

Mr. FERGUSON. I should say, generally speaking, that is true, but if we should maintain our prices too long when basic conditions, together with competition, required a reduction, we wouldn't be a price leader in that area very long.

Mr. O'CONNELL. You mean someone would take your leadership away from you?

Mr. FERGUSON. Someone would take the business and with it the leadership.

Mr. O'CONNELL. Then your reduction in price would be for the purpose of meeting another price or of keeping your business rather than an attempt to get additional business by virtue of a price differential.

Mr. FERGUSON. Yes; we don't attempt to get additional business by virtue of a price differential.

Mr. O'CONNELL. And if all companies took the same view we would never get a price reduction.

Mr. FERGUSON. I don't think that follows, because I think the general changes would still be made, based upon basic conditions, such as the price of crude which I mentioned by way of illustration, but

many other things would enter into it—the general level of commodity prices as a whole. For example, you couldn't maintain a price of gasoline of \$1 a gallon when the farmer was getting 25 cents for his wheat. He couldn't afford to use gasoline to move his wheat to market.

Mr. O'CONNELL. You couldn't do that if you were the only supplier of gasoline, of course.

Mr. FERGUSON. You would have price reductions, even if there were no competition.

Mr. O'CONNELL. One more question along a little different line. I understood you to say in 1938 your company made about \$1 a share. How many shares do you have outstanding?

Mr. FERGUSON. 4,700,000 shares.

Mr. O'CONNELL. Was 1938 as good as 1937?

Mr. FERGUSON. No; in 1937 we made about \$3 a share, roughly.

Mr. O'CONNELL. Are you in position to say anything about this year as compared to either '38 or '37?

Mr. FERGUSON. The first half of this year was not good. The second half might be a little better. I should say that so far as Continental is concerned we might do about as well this year as last year.

Mr. AVILDSSEN. Mr. Ferguson, you say you do not use price inducements to get additional volume, but your men are out trying to get additional volume I suppose. Would you tell the committee what inducements you do use to get additional volume?

Mr. FERGUSON. We have a great many sales aids. In the first place we spend a good deal of money advertising our product, which is a sales help. We have an organized selling force. That selling force attends in effect selling schools from time to time to teach them merchandising methods. We devote a great deal of time and money to maintaining the quality of our products, so that the salesmen can talk superior quality and demonstrate superior quality.

We have various demonstrating devices that they use in connection with the sale of lubricating oils to show the advantages of our products. I don't want to be taken at this moment as boasting that our product and our methods are superior to that of any other company, because the other responsible companies employ the same methods to get business without resorting to price inducements only.

Mr. AVILDSSEN. As a consumer, what do you give me as an inducement to buy? The other man reduces his price, you will say, but you wouldn't do that. You give me a lot of advertising and what else do you give me?

Mr. FERGUSON. We give you, as against some of the price reductions, convenience of location, courteous service, and a variety of other things that you don't get from the man who cuts the price most drastically.

For example, a type of price cutting in the oil business grows up around trackside stations, but in a town of any size a man isn't going from the residence district down to the railroad to buy gasoline 2 cents a gallon cheaper. He is offered the convenience of location, which determines the sale to him.

The CHAIRMAN. Do you use the credit card in marketing?

Mr. FERGUSON. We do not.

The CHAIRMAN. Is it used in the Rocky Mountain area at all?

Mr. FERGUSON. It is becoming more common there and we regret it very much.

The CHAIRMAN. Is the interchangeable card used in Wyoming?

Mr. FERGUSON. It may be, Senator, but we don't use it at all so I am not personally familiar with that.

The CHAIRMAN. Is it used in any of the areas in which you operate?

Mr. FERGUSON. As I stated, some of the companies that have come into the area are putting out credit cards. It is not nearly as prevalent in the Rocky Mountain area as it is in other parts of the United States. Whether it is growing or not, I don't know. I hope it isn't, but it may be.

The CHAIRMAN. Why?

Mr. FERGUSON. We think it is an expensive method of marketing. We don't think the expense of keeping all those accounts is warranted. That is our viewpoint.

WYOMING GASOLINE PRICES

The CHAIRMAN. I have here a memorandum on Wyoming gasoline prices which was prepared as a result of the questionnaires, and it is accompanied by a table of gasoline freight rates which was secured by the United States Attorney at Cheyenne from the Wyoming Public Service Commission. I thought it would be a proper thing to put this in the record but before putting it in the record I would like to submit it to you for your examination, in case you cared to make any comment about it.¹

Mr. FERGUSON. It is impossible for me to testify in confirmation of all of these figures.

The CHAIRMAN. I didn't expect that. I wanted to submit it to you in case you wanted to make any comment on it.

Mr. FERGUSON. I notice among other things that the cost per gallon of making gasoline is involved, and I can only reiterate my statement that all departmental accounts of that kind are misleading, and they are not comparable as between different companies making the return.

The CHAIRMAN. When you say they are misleading, just what do you mean? They don't mislead you—or I should say rather the marketing division of Continental in fixing its tank wagon price, do they?

Mr. FERGUSON. I don't think we fix our tank wagon price at a certain percentage over cost of manufacture. Our prices are competitive and we have to look at the whole picture when they flow in from all sources.

The CHAIRMAN. Of course, that might be, but without preventing you from knowing exactly what you were doing.

Mr. FERGUSON. We have these estimates of cost made up in order to guide us in the matter of pricing, but principally to guide us in how far out we can go in selling the gasoline.

The CHAIRMAN. So you have a pretty definite idea in your mind what you ought to sell your gasoline for in order to operate at a profit, don't you?

Mr. FERGUSON. To illustrate again what I mean, the Continental cost is lower, much lower, than any of these other companies in the State of Wyoming. I think that is correct. The reason it is

¹Admitted to the record infra, as "Exhibit No. 1296"; appears in appendix on p. 9517.

lower is not due to any superiority of manufacture, because I don't claim it, but it is due to the fact that we are getting our own crude oil from the Lance Field, producing it with our own money from our own wells, transporting it from our own pipe line into Glenrock at 33 cents a barrel less than the Casper refineries are paying for Salt Creek crude into their refineries. Now suppose we switch the 33 cents to our producing department. Suppose they said; "We are still in the red here a million dollars." We don't do that, because that happens to be the field price in that field and we charge the refinery the field price, but a proper distribution of earnings as between that refinery and the field would give our producing department in the Lance Creek field at least what the producers in the Salt Creek field get, but we can't get it.

The CHAIRMAN. Do you mean to tell us that you are manufacturing gasoline cheaper at Glenrock now than you were 5 years ago?

Mr. FERGUSON. Yes; due to that artificial condition.

The CHAIRMAN. If the other companies operating in the Rocky Mountain area and the Continental operating at other points than Glenrock were able to manufacture their gasoline at the cost price put down there in your questionnaire, obtaining at Glenrock, these companies and the Continental would be making larger profits at the present cost.

Mr. FERGUSON. Yes; all of the companies would be making larger profits, but today I think the Continental Oil Co., due to having its own production and its own pipe lines at Glenrock, has an advantage over these other companies. I think it is an advantage due to location and due to the fact that we risked our money getting the production and risked our money in pipe line.

The CHAIRMAN. If you had that cheap crude oil in your own pipeline, why wouldn't it be a good idea to expand the Glenrock refinery? Let me send a telegram out home tonight that you are going to expand the refinery.

Mr. FERGUSON. Could you sell the fuel oil, do you think? I don't think we could, I know we couldn't.

The CHAIRMAN. The answer is, from your previous testimony, that the reason refineries do not operate at the fields to the same advantages as the marketers is that they cannot dispose of the byproducts profitably at the fields.

Mr. FERGUSON. And transportation cost on the raw material in is always less than the transportation cost out on refined products.

The CHAIRMAN. Did you care to have any other comment on that memorandum?

Mr. FERGUSON. I am in no position to confirm the statements made, but I have no objection to their being put in the record for what they are worth.

(The memorandum referred to was marked "Exhibit No. 1296," and is included in the appendix on p. 9817.)

The CHAIRMAN. Could you give me the names of the companies which are turning to the credit card in the Rocky Mountain area?

Mr. FERGUSON. I think that practice in the Rocky Mountain States was brought into the territory by the California companies, the companies operating in California. That may not be the whole story, but that has been a very prevalent practice in California for many years.

As the companies operating in California began to extend their activities into the Rocky Mountain territory I think they brought with them that credit-card practice.

The CHAIRMAN. And the credit-card practice includes the interchangeable card which may be presented at any filling station of any of the major companies?

Mr. FERGUSON. We have no such thing.

The CHAIRMAN. I know you don't, but I mean that is the practice, is it not?

Mr. FERGUSON. I don't know. I am not by any means qualified to discuss credit cards.

The CHAIRMAN. I thought you might have observed that.

Are there any other questions?

Mr. Ferguson, we are very much obliged to you for your presentation.

The committee will stand in recess until 2:15.

(Whereupon, at 12:40 p. m., the committee recessed until 2:15 p. m. of the same day.)

AFTERNOON SESSION

Whereupon, on the expiration of the recess, the hearing resumed at 2:45 p. m.

The CHAIRMAN. The committee will please come to order. Mr. La Fleiche, will you be sworn, please? Do you solemnly swear that the testimony you are about to give in these proceedings shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. LA FLEICHE. I do.

The CHAIRMAN. Will you be good enough to give your name to the reporter?

Mr. LA FLEICHE. Pierre La Fleiche.

TESTIMONY OF PIERRE LA FLEICHE, CASPER, WYO.

The CHAIRMAN. Where do you reside?

Mr. LA FLEICHE. Casper, Wyo.

The CHAIRMAN. What is your business?

Mr. LA FLEICHE. I am in the oil business.

The CHAIRMAN. How long have you been in the oil business?

Mr. LA FLEICHE. Twenty years.

The CHAIRMAN. Have you held any official position?

Mr. LA FLEICHE. I was mineral supervisor for the State of Wyoming 5 or 6 years.

Senator KING. You are not in that position now?

Mr. LA FLEICHE. No, sir.

Mr. AVILDSEN. What is your position in the oil business today?

Mr. LA FLEICHE. Geologist and independent oil operator.

Mr. AVILDSEN. A producer?

Mr. LA FLEICHE. No; a prospective producer, I hope.

The CHAIRMAN. You may proceed with your statement, please.

THE PETROLEUM INDUSTRY IN WYOMING

Mr. LA FLEICHE. Wyoming has produced crude petroleum for commercial purposes since the year 1863, when oil from springs was

bartered by the Seminole Indians to early settlers. Since that time 107 oil and gas fields have been discovered. From the first discovery and development of oil and gas to July 1, 1938, the best available records show a total of 8,071 wells drilled at a total cost estimated at \$96,858,000, or an average cost of about \$12,000 per well. Of these wells, 4,291 were drilled on public lands of the United States and 3,780 on State and privately owned lands. A further classification of wells as of this date shows 34 percent actively producing, 18 percent shut in, 46.5 percent dry holes and abandoned producers, and 1.5 percent drilling.

Of the oil and gas fields in the State, there are shut in, due primarily to a lack of suitable markets for their production and also inadequate transportation facilities, 2 light-oil and 14 black-oil fields, and 9 gas fields.

PRODUCTION

Mr. LA FLEICHE. To July 1, 1938, there had been produced a total of 411,579,402 barrels of light oil and 32,527,095 barrels of black oil, or a total of 444,106,497 barrels. Of this, Salt Creek has produced 279,705,587—63 percent; Big Muddy, 25,903,000 barrels, or 6 percent; Elk Basin, 10,427,127 barrels, or 2.5 percent; Grass Creek, 26,311,782 barrels, or 6 percent; Lance Creek, 13,346,441 barrels, or 3 percent; Lost Soldier, 19,156,000 barrels, or 4.3 percent; Rock River, 17,643,318 barrels, or 4.5 percent; and Oregon Basin, 9,129,971 barrels, or 2.3 percent. Thus 8 fields have produced about 91 percent of all oil produced in the State and the other 99 fields about 9 percent.

The CHAIRMAN. Mr. La Fleiche, may I interrupt to ask whether you have any information with respect to whether or not this production is produced by so-called independents or by so-called majors?

Mr. LA FLEICHE. I don't have any actual statistics on the percent of production produced by majors or so-called independents. However, I would estimate that the major portion of the oil is produced by the major oil companies.

The CHAIRMAN. What proportion?

Mr. LA FLEICHE. I would say approximately 75 percent.

The CHAIRMAN. And how about these reserves of which you were speaking? You testified that there are 11 shut-in fields; are there?

Mr. LA FLEICHE. There are 2 light oil and 14 black-oil fields, making 16 fields.

The CHAIRMAN. Have you any information or impression with respect to who controls those fields, whether independents or majors?

Mr. LA FLEICHE. That is a very hard question to answer, Senator, because I don't know personally about the nature of the ownership there. However, it is my impression that the majority of these fields are owned by the larger oil interests.

The CHAIRMAN. When you say "owned"—

Mr. LA FLEICHE. They have the development rights.

The CHAIRMAN. You mean the development rights?

Mr. LA FLEICHE. Yes; that is what I mean.

The CHAIRMAN. Many of these fields I suppose are in the public domain.

Mr. LA FLEICHE. Yes; they are mixed, State lands, public lands, and patented lands.

The CHAIRMAN. All right, sir.

Mr. LA FLEICHE. The total cumulative production of the State to date is about 470,000,000 barrels of oil.

Amongst the oil States, Wyoming stands tenth and has produced about 2.3 percent of the crude oil of the United States.

No proration of Wyoming production by a regulatory agency exists nor is there statutory provision for such regulation. The production of Wyoming oil has been much below the Bureau of Mines estimates, and as long as this condition exists there is little need for such control. The market defines the production and proration is thus automatic.

Wyoming is a public-land State, and much of the land within its boundaries belongs to the United States of America. A recent tabulation reveals the fact that about 56 percent of the oil produced in the State was from the public lands, 33.5 percent of it from privately owned lands, and 10.5 percent from State lands. Royalties paid to the United States on oil produced from public lands in Wyoming to July 1, 1938, amount to over \$57,000,000. Of this, 37½ percent was paid direct to the State for school and road purposes, 52½ percent accrued to the reclamation fund of public-land States, and 10 percent went for administrative purposes. Royalties on oil from State lands amounted to over \$18,000,000 and to fee-land owners an estimated \$23,000,000.

Senator KING. Does the Federal Government make any accounting for the disposition made of that 10 percent for administrative purposes?

The CHAIRMAN. That goes into the Treasury under the Oil and Gas Leasing act.

Senator KING. What I am trying to get at is whether it was just an arbitrary amount or whether that was actually needed for administrative purposes.

The CHAIRMAN. I think it was an arbitrary amount fixed at the time that the leasing act was passed. I didn't know whether the witness was as familiar with it as you and I.

Senator KING. I wanted the record to show if this witness knows that a large sum is reserved or disposed of for administrative purposes, much larger, in my opinion, than is necessary.

Mr. LA FLEICHE. I imagine at the time this law was made that the amount of revenue from royalties was a matter of anticipation; resulting from years of royalty payments perhaps now there is some basis for a determination of whether or not the amount is excessive or inadequate.

The CHAIRMAN. Inasmuch as Senator King has raised that question, it might be proper for me to interrupt at this time to say that earlier in the year I obtained a statement from the Department of the Interior with respect to the income from royalties under the Oil Leasing Act, and this statement shows that for the fiscal year 1938 the total receipts from oil royalties in all of the oil States amounted to \$3,353,866.82, and that to June 30, 1938, the total receipts amounted to \$55,635,868.99. I think it may be proper to insert this letter in the record at the conclusion of the testimony of the witness.¹

You may proceed.

Mr. LA FLEICHE. Wyoming's reserves are estimated at 156,000,000 barrels of light oil and 250,000,000 barrels of black oil, or a total of 406,000,000 barrels or recoverable oil. The United States as a whole

¹Admitted infra as "Exhibit No. 1300"; appears in the appendix on p. 9840.

is exhausting its reserves at a rate of over 1.6 percent times that of Wyoming.

For a State as sparsely settled as Wyoming, it refines a high percentage of its crude-oil production. For example, of the States producing over 7,000,000 barrels of oil per annum, Arkansas refines 78 percent, California, 85 percent; Kansas, 72 percent; Louisiana, 73 percent; Michigan, 51 percent; New Mexico, 4.5 percent; Oklahoma, 17 percent; Texas, 70 percent; and Wyoming, 64 percent of its production in the State. These figures are for the year 1937, but for 1939 will not vary greatly.

The CHAIRMAN. What was the comparative production in those States there mentioned, or in what order would you list them on the basis of the amount of production?

Mr. LA FLEICHE. I don't recall—

The CHAIRMAN (interposing). Louisiana, for example, would produce more oil than Wyoming, would it not?

Mr. LA FLEICHE. I believe that all of these States here produce more oil than Wyoming. I believe Texas has a production of over a million barrels a day, and next in order possibly California. I am taking these in round numbers because I don't know what the production of these States is, but, to get the approximate position of the State of Wyoming, California, I think, is around 500,000 or 550,000 barrels a day, and someone tells me now that Illinois ranks about third on the production list. I don't know whether that is true or not, but Wyoming produces itself about 60,000 barrels a day of oil at the present time. The run is from 20 to 22 million barrels a year.

The CHAIRMAN. And you think it is still refining 64 percent of that production?

Mr. LA FLEICHE. Yes; over a period of several years it has kept that relationship very closely.

The CHAIRMAN. What will be the effect, in your opinion, of the construction of the pipe line from Lance Creek to Salt Lake City on that percent?

Mr. LA FLEICHE. I doubt that it will have a great deal of effect on the refining of oil in Wyoming for the simple reason that there is at the present time a refinery in Salt Lake that is marketing in a certain district there.

The CHAIRMAN. You don't think that will affect the percentages?

Mr. LA FLEICHE. I don't believe it will; no.

The CHAIRMAN. Proceed.

Mr. LA FLEICHE. Production costs appear to be among the highest in the United States, according to data compiled by the Petroleum Administrative Board in 1934. Costs as used include "general and administrative overhead, exploration, research, interest on invested capital, and actual operating expenses." These costs were given at \$1.13 per barrel in 1931, \$1.18 in 1932, and \$1.08 during the last 3 months of 1933, and will probably approximate that amount in 1939.

The CHAIRMAN. Do you know how broad that survey was from which this was made?

Mr. LA FLEICHE. Senator, I don't know. I was furnished a copy of this survey, and how extensive it was I don't know.

The CHAIRMAN. Well, do you think that the selling price of crude oil is sufficient to cover this average?

Mr. LA FLEICHE. No. The average selling price, that is the selling price of average Wyoming oils, is less than these costs for the period of the years mentioned.

The CHAIRMAN. Is there any difference in costs as far as you know between that which the independent must meet and the major producer meets?

Mr. LA FLEICHE. The costs of production?

The CHAIRMAN. Yes.

Mr. LA FLEICHE. Most of the independents, that is the small independents, calculate their costs different than this set-up. Very few of them have exploration departments, and a number of the items that are mentioned here would probably not be included in an independent's cost.

The CHAIRMAN. Would you understand this to be a cost of a major company?

Mr. LA FLEICHE. That is correct; yes. I believe the major companies would be the only companies that could furnish this information to the administrative board.

The CHAIRMAN. But the authority for this statement is that of the Petroleum Administrative Board?

Mr. LA FLEICHE. That is right.

The CHAIRMAN. Very well.

Senator KING. Is the cost of production by independents greater or less than the cost of production by the large companies?

Mr. LA FLEICHE. I would say it is less.

Senator KING. Then the superior advantages, if there be advantages, from large production and a wider market are offset by smaller profits compared with those made by independents? In other words, the independents have an advantage, if I understand you rightly?

Mr. LA FLEICHE. The independents do have some advantage in that respect; yes.

Senator KING. They can produce cheaper per barrel than the big company?

Mr. LA FLEICHE. As a general statement I would say yes.

The CHAIRMAN. Why is that so?

Mr. LA FLEICHE. The independents—and I am classing all persons producing oil as independents—don't include the number of charges that the major oil companies include.

The CHAIRMAN. Do they incur those charges?

Mr. LA FLEICHE. Beg pardon?

The CHAIRMAN. Do they incur those charges? Do they have to meet them?

Mr. LA FLEICHE. In some respects they do, and in some respects they don't. I consider independents as operating properties themselves. They usually make no allowance for their own wages or superintendence from that standpoint. In other words, they have been able to take small stripper fields with wells of small productive capacity that a major oil company wouldn't attempt to operate. They will operate those successfully; they will return themselves a profit. However, if the methods used in accounting were those the larger oil companies use they probably would show a loss.

The CHAIRMAN. Well, of course, the question fundamentally is whether the independent by and large can produce oil more cheaply than the major. That seems to be raised by what you are saying, and

that question seems to be raised. It would be a matter of great significance if it were a fact that it cost the major companies more to produce a barrel of oil than it does the independents. But as you qualify your statement, am I to understand that you mean the independent can produce more cheaply than the major because he operates properties which a major company wouldn't handle?

Mr. LA FLEICHE. That in a measure is correct; yes.

Senator KING. I suppose the major companies expend considerable money in exploration and experimentation. You stated a moment ago, if I correctly understood you, that about 34 percent of the large number of wells which have been drilled were dry holes, dry wells. I assume that most of those wells which were not productive were drilled by the major companies, coming back to the question now of those preliminary observations. I assume that a considerable part of the costs of the major companies are incurred in their exploration and experiments, drilling in ground, perhaps, which had not been explored; whereas independents, from your statements, were taking ground where there had been exploration and where it was demonstrated that there was oil, but perhaps the amount which would be recovered would be so small that the major companies didn't care to undertake the development?

Mr. LA FLEICHE. Small independent companies and the independent operators who come and go—by that I mean those that organize a company to drill a well, but if that is a failure, it is charged off and is forgotten. If a major oil company drills that well they pay for it and that cost is carried along in cost of future oil that might be taken from the ground.

Senator KING. So many of the independent companies drill a hole and they don't get anything, and perhaps the company is dissolved.

Mr. LA FLEICHE. That is usually the case.

Senator KING. And there would be no accounting as to the cost of that fruitless effort.

Mr. LA FLEICHE. That is right.

The CHAIRMAN. And that loss is not passed on to the public, whereas the loss of a major operator, controlling large reserves, is passed on to the public.

The subject is one of great interest because when the Leasing Act was passed, Congress endeavored to outline a policy of encouraging the so-called small operator, the prospector, the independent, and the limitation was placed upon the amount of land which one operator could hold in a particular field or in a particular State, but the testimony before this committee seems to coincide with what you have just testified to, namely, that the major companies control by far the largest proportion of oil reserves in the United States. You testify that in Wyoming at least 75 percent of production comes from the operation of the big companies. Now then, if that is true, would one be justified in drawing the inference that encouragement of independent production would tend to lower the cost of producing and therefore lower the cost of petroleum to the public?

Mr. LA FLEICHE. I would say that it would; yes.

Senator KING. What proportion of that seventy-odd percent that you have just indicated was produced by the major companies comes from the publicly owned lands and what proportion from State-owned and what proportion from privately owned?

Mr. LA FLEICHE. I wouldn't have the information to answer that question, Senator. I don't think that the information has ever been broken down as your question was put. The percentage of prospective lands or percentage of reserve production owned by the State and by the Government, by patented-land owners, varies in the different fields to a great extent, and the only reason a person would want to get that information would be for statistical purposes, and I don't believe anybody has ever gone to the expense of attempting to obtain it.

The CHAIRMAN. Doesn't your testimony with respect to the classification of the lands from which oil has been produced in the State substantially answer the Senator's question?

Mr. LA FLEICHE. That is on the basis of barrels produced, and a person has to take into consideration the fact that the productivity of lands varies greatly over an individual pool. Perhaps as a general picture, it gives an idea of the relative ownership, but not necessarily so.

Senator KING. That is to say, one pool on public land might produce a great deal and a number of pools upon State lands or privately owned lands would produce a limited amount, measured by the larger quantity produced by the pool upon the publicly owned lands.

Mr. LA FLEICHE. In a given pool you might have three leases of equal area, one is State land, one is patented land, and one is Government land or public land. Ninety-five percent of the production might come off from public land and the other 5 percent production off from the other two classes of land. That is possible. So in these figures, it may give a general index, inasmuch as they are broad all over the State, as to the relative amounts of productive oil land owned by the respective interests, that is, the Government and the State and private citizens, and I think it is a fair index of that relationship.

Senator KING. From your observations in the State, what would be your opinion as to the ownership of the lands in Wyoming in which the reserves may be found? In other words, would the greater part of it be on public lands or State-controlled or privately owned lands.

Mr. LA FLEICHE. I would say the greater proportion of it is on Government land; yes.

The CHAIRMAN. Most of the oil fields in Wyoming which have been brought in are on the public domain, are they not?

Mr. LA FLEICHE. As a general statement; yes.

The CHAIRMAN. Of course, there are privately owned lands in various fields and the State owns lands in various fields, but the largest proportion of the acreage is on public domain, is it not?

Mr. LA FLEICHE. There are some exceptions. For instance, the Byron and Garland fields. Originally those fields were developed in irrigated sections in which the title has passed to private citizens. In those fields the private citizens owned, by a great majority, the lands and the structures. On some other oil pools, the situation is reversed. As a general rule, most of our oil pools are found in very poor areas.

Senator KING. Have any of the fields been exhausted? The reason I make that inquiry, I recall the testimony of one of the witnesses from Texas and his testimony indicated the oil sands penetrated to a very great depth, indeed they hadn't discovered, hadn't reached the

depth yet. I was wondering if similar situations prevailed in any of the oil fields in Wyoming.

Mr. LA FLEICHE. I don't know, Senator, that any field in the world has ever been exhausted. That would be a physical impossibility. It might be economically exhausted so far as the recovery of any oil at a profit is concerned, but there is always a portion of the oil that remains in the reservoir. It may be an increased price of petroleum would allow more of that to be taken out by the present methods of production or that new methods of production might be found that would allow it to be taken out at the present price. There are lots of fields that are not commercially productive.

Senator KING. I recall that a number of years ago statements were made that certain fields in California had been exhausted. I didn't ascertain whether or not they were economically exhausted or whether as a matter of fact all of the oil had been obtained from the sands by pumping or by pressure. But in your State, so far as you know, the fields have not been exhausted?

Mr. LA FLEICHE. I don't know of any that have been exhausted; no.

The CHAIRMAN. You may proceed.

Mr. LA FLEICHE. Exhibit A shows crude oil prices from 1924 to July 1, 1938.

I have two small charts here, Senator. I have only two copies of them. I will pass them over for your inspection.

The CHAIRMAN. Is this Exhibit A?

Mr. LA FLEICHE. The first one there is Exhibit A; yes.

The CHAIRMAN. It may be admitted to the record.

(The chart referred to was marked "Exhibit No. 1297," and is included in the appendix on p. 9820.)

The CHAIRMAN. This consists of six pages?

Mr. LA FLEICHE. That is correct.

Charts 1 and 2 show some comparative prices of Wyoming and Mid-Continent oil. Those are the charts you have in your hand.

The CHAIRMAN. And this you offer as Exhibit B, comparative schedule of Mid-Continent and Wyoming light oils, and a comparative schedule of Wyoming black oils?

Mr. LA FLEICHE. That is correct.

The CHAIRMAN. These then are Exhibits B and C. What do they purport to show?

Mr. LA FLEICHE. Some relative relationships of prices of black oil and the prices of light oils relative to certain Mid-Continent prices.

The CHAIRMAN. This compares the posted price in Wyoming with the Mid-Continent posted price?

Mr. LA FLEICHE. It does on the light oil.

The CHAIRMAN. And how about the black oils?

Mr. LA FLEICHE. In the black oils there is really no basis of comparison. It does show the price trends of certain black oils.

The CHAIRMAN. The exhibits may be admitted.

(The charts referred to were marked "Exhibit No. 1298," and are included in the appendix on p. 9838.)

The CHAIRMAN. You may proceed.

Mr. LA FLEICHE. It is significant to note that, up until 1925, when Salt Creek oil was placed on the Mid-Continent schedule Wyoming light oils were sold at a differential from 35 to 75 cents under equal grades of Mid-Continent oil. For instance, during 1914 the differen-

tial for Salt Creek averaged 55 cents under; 1914, 85 cents; 1917, 70 cents; 1918, 1919, and 1920, 75 cents.

The CHAIRMAN. Seventy-five under?

Mr. LA FLEICHE. Under Mid-Continent equivalent grades. 1921, 30 cents; 1923, 30 cents; and 1924, 40 cents. The extinguishment of this unfavorable differential may be attributed to competitive factors entering into crude-oil purchasing field, and primarily to the trunk pipe line extending to Missouri.

Black oil prices from 1922 to 1938 are compared on chart No. 2.¹ A general downward trend is to be noted until in 1938 in the instance of Hamilton Dome crude : n all time low of 35 cents per barrel is posted, and, with the exception of a period in 1933 and 1934, is also a low for Grass Creek heavy. (See also Exhibit A.)²

Comparison of Wyoming crude oil prices with the prevailing market prices of oils produced elsewhere in the United States, as listed by the Oil and Gas Journal, for the months of October and November 1938, reveal the interesting fact that Hamilton Dome and Grass Creek black oils bring the lowest prices of any oil of any gravity; Grass Creek and Elk Basin are among the lowest of any comparable oils in the United States.

Senator KING. Is that because of inferior quality, chemically speaking?

Mr. LA FLEICHE. I can't explain why those oils should be so low in price. I can tell of some of the reasons that are given as to why the oils are so low in price.

The CHAIRMAN. What are the reasons that are given?

Mr. LA FLEICHE. The reasons given are largely a matter of competition. In other words, in the Big Horn Basin, the black oils are forced to compete on the fuel oil market and in the asphalt or road oil market. They are primarily valuable for those two purposes. Gasoline and some of the other lighter fractions are incidental in the manufacture of road oil and fuel oil.

The fuel oil market, as I have been told, for black oils is primarily in the Minnesota region, around Minneapolis and through there, and of course some of it gets up into Montana and North and South Dakota and through that region.

The 10 percent increase in freight rates granted here about a year or a year and a half ago shut out some of the Minneapolis market.

The CHAIRMAN. You are referring to the blanket increase?

Mr. LA FLEICHE. That is the blanket freight increase of 10 percent; yes.

And the Illinois fields that are producing today have taken a good share of the fuel market of the Minneapolis district.

Further than that, our Wyoming black oils have a high sulphur content that does make refining more difficult than some other black oils produced in the United States.

Senator KING. That would be regarded as a deleterious admixture?

Mr. LA FLEICHE. That is correct.

Senator KING. Solvent or insoluble.

Mr. LA FLEICHE. The light oils produced in the State I believe with the possible exception of some of the oils in the Big Horn Basin region, should be on a parity with Mid-Continent.

¹ "Exhibit No. 1298," appendix, p. 9838.

² "Exhibit No. 1297," appendix, p. 9820.

Senator KING. Well, I assume from your statement—if I am incorrect will you please correct me—that there are a number of factors that enter into the determination as to why oils in one section are a higher price than another; freight rates are primary.

Mr. LA FLEICHE. I don't really know, Senator, how the price of oil is determined, especially in a specific instance. There is a competitive factor, and there is the value of crude for refining purposes, and the refining purposes in some sections of the country may be different than in another section for a similar grade of oil.

The base that I prefer to go on is the relative relationship that those oils have enjoyed in the past as compared with the relationship they enjoy today. In other words, I believe that is something that is more tangible to work upon.

Senator KING. All oils are not the same; they don't have the same heat units, they don't have the same specific qualities, the same chemical qualities, if I may use that expression; there may be more oxygen, more hydrogen, more carbon in one oil than in another. I am not sufficiently acquainted with the specific elements that enter into the composition of oil to discuss that, but you mention light oils and heavy oils, oils for heating purposes, this purpose or that. Apparently then all oils are not of the same quality.

Mr. LA FLEICHE. That is correct.

Senator KING. And therefore prices would differ from place to place or with respect to the uses to which the oil was put, the purposes for which it was required.

Mr. LA FLEICHE. Well, we make more or less of an arbitrary classification of oils. We call our light oils, oils that have an olive green color, we will say, and high gasoline content, and relatively small amount of asphalt in them, we call those light oils; black oils are black colored oils that have a large percentage of asphalt and are suitable for road oil, fuel-oil purposes, and don't carry a very high percentage of gasoline. It is more or less of an arbitrary classification because nearly all of our oils are mixed base; in other words, they have some asphalt and some paraffin; in the hydrocarbon series they have some differences, and there are no two oils that are identical.

Senator KING. Therefore there would be different prices for oils.

Mr. LA FLEICHE. There will be; yes; different prices for oils.

The CHAIRMAN. Well, these differences exist elsewhere, do they not?

Mr. LA FLEICHE. All over the United States.

The CHAIRMAN. In other words, the differences you are talking about now are not characteristic of Wyoming oil.

Mr. LA FLEICHE. That is correct.

Senator KING. I didn't assume that Wyoming was to be differentiated from the rest of the United States.

The CHAIRMAN. You may proceed, Mr. La Fleische.

Mr. LA FLEICHE. Already the low price of Lance Creek oil has undermined the price structure and production of Osage crude. This oil is being trucked almost into the Osage field itself by refiners heretofore operating exclusively on Osage crude. Furthermore, it threatens to ruin the market and seriously upset the production from other of the older Wyoming fields. The situation of the oil producers in a number of Wyoming fields is extremely precarious, and it is indeed

marvelous that the producers can continue to exist under the high transportation costs, high wage scale, adverse operating conditions, and low crude-oil prices. It is significant to note that under the Bureau of Mines recommendations of production for November, Wyoming was producing a less percentage of such recommendation than any other State in the Union. In addition, drilling operations in Wyoming were fewer than in any other oil-producing State, with the exception of Montana, Colorado, and Indiana.

Those figures are for November 1938.

TRANSPORTATION

Mr. LA FLEICHE. Until the completion of the trunk pipe line to Freeman, Mo., in 1924, Wyoming depended largely upon intrastate refining facilities and the railroads for disposal of its petroleum and refined products. The completion of the said pipe line permitted Salt Creek crude oil to compete with Mid-Continent crude. This line was closed to traffic in, I think, about 1925 or 1926, and then reopened to traffic in 1936. The production of the Salt Creek field greatly exceeded the ability of the market to absorb the crude, and from 1920 to 1925 the storage of oil above ground increased from 600,000 barrels to over 25,000,000 barrels, which constituted one of the most top-heavy storage stocks in the United States. Additions were made in substantial amounts to this storage until the year 1936, when the trunk line to Missouri was reconditioned and removal of storage oil commenced.

The crude oil requirement of refiners located in the Salt Lake City, Utah, district is transported by pipe line and then by rail from southern and western Wyoming fields. A pipe line is, however, now under construction which will carry Lance Creek oil and also the production from other fields mentioned. It will be interesting to observe if this cheaper and more economical means of transportation will effect any increase in the prices of crude oil sold from the fields, contributory to this line. This is doubtful as a 6-year contract has already been made for Lance Creek crude that specifies a price of 25 cents below 36 gravity Mid-Continent oil for a 2-year period and increases 13 cents effective during the last 4 years. A pipe line has also been constructed from Lance Creek through southern Wyoming to Denver, Colo., but this construction has resulted in no increased prices to the producer over those prevailing under previous less favorable and more costly transportation.

The CHAIRMAN. In other words, you are saying that the construction of the pipe lines which afford a cheaper means of transportation is not resulting in any benefit to the producer but to the purchaser of the oil.

Mr. LA FLEICHE. I can say that it has represented no price benefits to the producer, that is, the price for crude petroleum, but as for the benefits to the refiner or the transporter of the crude I don't know, it depends on how that split is made.

The CHAIRMAN. Well, let me put it on the basis of benefits to the purchaser. If the price is reduced the purchaser gets the benefit and it becomes a buyer's market instead of a seller's market?

Mr. LA FLEICHE. You mean the purchaser of the crude oil?

The CHAIRMAN. That is right.

Mr. LA FLEICHE. The purchaser of the crude would get the benefits.

Mr. AVILDSSEN. Mr. La Fleiche, isn't it a fact that the owner of those wells out there is benefited indirectly by this pipe line to this extent, that, let us say, a certain oil company is taking that oil now through its pipe line, not giving him any advantage in transportation, but later on that oil company could buy oil elsewhere at a few cents less; they would be less apt to go to that other market for their oil, now that they have their investment in this pipe line, that they are more likely to stay there and buy from that producer. Isn't that producer better off by that pipe line having been put in there?

Mr. LA FLEICHE. That has certain advantages to the producer; yes. In the instance of, we will say, oil produced from the La Barge field, which goes exclusively to the Utah refinery, that oil is transported by pipe line down to a loading rack, a siding called Opal. The rate I believe is 35 or 40 cents a barrel. Now unquestionably this pipe line from La Barge to Opal would be connected into the pipe line leading from Lance Creek to Salt Lake City. The question is, will the field benefit by an increased price as a result of the probable decreased cost of transportation of that crude? Now there is no competition to this field over there. There is no oil produced or very little oil produced in Utah. The La Barge field is the closest field. It has the Utah market and it is unreasonable to presume that any other field under existing conditions could take that market away from La Barge.

Also in Medicine Bow and Rock River and Quealy. Now a goodly portion of those crudes has gone into Salt Lake City by pipe line and then by rail. Now those oils have for a large number of years enjoyed a certain relationship with Mid-Continent oils; that is, the price has. When this pipe line is constructed, and the pipe line is, next to water, the cheapest means of transporting oil known, when this is constructed, are some of these benefits going to be passed on to the producer in the form of increased crude prices or is the transporter going to gobble up all of the benefits?

Senator KING. Or would the consumer get some benefit?

Mr. LA FLEICHE. If the refinery is able to get cheaper crude it is reasonable to presume that they will give the consumer cheaper manufactured products.

Senator KING. Generally speaking, throughout the United States, has not that been one of the objectives, to get the price of crude oil as low as possible in order that the conversion of the crude into gasoline—the result might give a cheaper product to the consumer?

Mr. LA FLEICHE. No; I don't believe that there has been any specific effort to make crude oil as low as possible so the consumer could get it cheaper.

Senator KING. I didn't speak so much of crude oil, but the cheaper you can get your crude oil, the cheaper, all things else being equal, the same factors being involved, the cheaper should be the gasoline to the consuming public?

Mr. LA FLEICHE. Not necessarily. There is a certain point that that ceases to be true. For instance, if you would deliver a barrel of crude to a refiner, free of all cost at his plant, it still would cost him so much money to refine it, load it on the tank cars, transport it to the jobber, and then deliver it to the retailer to put in the tank of the consumer.

Senator KING. I didn't make myself clear. The cost of the crude is an element in determining the ultimate cost of the gasoline?

Mr. LA FLEICHE. That is correct; yes, sir.

Senator KING. To the consumer?

Mr. LA FLEICHE. That is very true; yes, sir.

The CHAIRMAN. Now the building of the first pipe line to Missouri had the effect of extinguishing the differential, you testified?

Mr. LA FLEICHE. That is correct.

The CHAIRMAN. So that the construction of that pipe line brought the price of Wyoming crude up?

Mr. LA FLEICHE. To a parity with similar grades of Mid-Continent.

The CHAIRMAN. Of Mid-Continent, but now do I understand that in your opinion the construction of the Continental Oil Co.'s pipe line to Denver, and the construction of the new Utah Oil & Refining Co.'s pipe line to Salt Lake City is going to have the reverse effect of reducing the price of crude again?

Mr. LA FLEICHE. It shouldn't, but in the instance of the Continental line to Lance Creek it certainly hasn't resulted in any increase in the price of crude. The old price basis, which came about through an original contract of the Ohio Oil Co. with the Sinclair, for the purchase of about 1,000 to 1,500 barrels of crude oil for delivery to the Parco plant. This price was set at 77 cents which, as I understand it, was the price that allowed Lance Creek oil to compete with Salt Creek oil, delivered into Parco.

The CHAIRMAN. Well, in your opinion, is there any basis now for a differential between Wyoming crude and Mid-Continent crude?

Mr. LA FLEICHE. In the crude that we are discussing, Lance Creek, I would say no. I believe that Lance Creek oil should be on a parity with similar grades of Mid-Continent crude.

The CHAIRMAN. Why?

Mr. LA FLEICHE. For the simple reason it can be laid into the same places just as cheap.

The CHAIRMAN. How about quality?

Mr. LA FLEICHE. I believe the quality is superior to 40 gravity Mid-Continent crude. Now that is a very debatable question. It might be more valuable to some refiners than to others and there is also the octane value of the gasoline manufactured from Lance Creek crude, which I understand is slightly lower than Salt Creek. But Sinclair was willing to pay as much for Lance Creek crude as he was for Salt Creek crude, providing it could be delivered for the same price at the Parco plant. So it seems to me that would establish—they being in the refining business and a responsible operator, would establish apparently a value of Lance Creek crude and Salt Creek crude.

A considerable amount of oil from eastern and northern Wyoming fields has, in the past, been shipped by rail to refineries in Montana and Canada, but subsequent development of Montana oil fields and the recent Canadian fields has severely cut into this market, and at the present time no Wyoming oil is moving into Canada. Of the eastern Wyoming fields, considerable of the crude is now being shipped by truck to small refineries located in South Dakota and in Nebraska.

The major oil fields of the State are connected by pipe line to refineries or to loading racks on railroads serving such refineries.

A number of the black-oil fields, however, lack pipe-line facilities and are shut in. Truck transportation of crude oil from a number of the fields is becoming highly competitive with existing pipe-line and railroad services. The crude requirements of most of the small refineries, or skimming plants, is transported by this means. Wyoming pipe lines and their published tariffs are as follows:

	Miles	Published tariff
Fargo-Western: So. Casper Cr. to Casper.....	22.50	\$0.20
Illinois Pipe Line:		
Grass Creek to Chatham.....	24.01	.20
Oregon Basin to Cody.....	15.41	.125
Mule Creek to Dakoming.....	14.00	.25
Byron to Greybull.....	41.78	.25
Elk Basin to Greybull (July).....	63.39	.30
Grass Creek to Greybull (July).....	78.81	.20
Hamilton Dome to Greybull (July).....	77.08	.20
Rex Lake to Hutton.....	1.87	.15
Lance Creek to Lusk.....	25.20	.20
Lance Creek to Ft. Laramie.....		.275
Rock Creek to Rock River.....	7.57	.20
Medicine Bow field to Medicine Bow.....		.12
Byron to Lovell.....		.10
Dutton Creek to Rock River.....	20.06	.25
Continental Oil:		
Lance Creek to Manville.....		.125
Lance Creek to Cheyenne.....		.30
Rocky Mt. PL Co.: Lance Creek to Denver.....		.45
The California Co.: Quealy to Rock River.....		.16
Wyoming Oil & Gas: Osage field to Osage.....	13.75	.15
Osage Trust: Osage field to Crites.....	5.00	.15
Sinclair:		
Casper to Parco.....	102.40	.20
Ferris to Parco.....	32.20	.16
Lost Soldier to Parco.....	52.20	.30
Salt Creek to Parco.....	136.90	.25
Salt Creek to Casper.....	37.72	.20
Standard Oil Co. of Ind.: Salt Creek to Casper.....	37.72	.1.20
Stanolind Pipe Line Co.: Welch (Clayton) to Sugar Creek, Mo.....	850	.24
Stanolind Pipe Line Co.: Lance Creek to Sugar Creek, Mo.....	780	.29
Standard Oil Co. Indiana: LaBarge to Opal.....	38	.35
Atlantic Pacific: Dallas-Derby to Wyopo.....	11	.15
Yale Oil Co.: Hidden Dome to Worland.....		(?.) .20

1 10 plus 10.

2 24 plus 5.

The natural market for products refined in the State of Wyoming is in the States immediately adjacent. However, in the early 1920's, favorable export conditions and export rail rates together with a price differential against Wyoming oils permitted the sale and exportation of large quantities of Casper-made gasoline. These shipments were eventually discontinued due to increased competition from South American and Mexican oils. The Colorado market is highly competitive, as products from western Kansas and Oklahoma and northwest Texas can be moved into the Colorado territory under very favorable rail rates, and here again trucks are also a factor. A market formerly enjoyed in the Minnesota and eastern North and South Dakota regions has been taken by means of a gasoline line from the Mid-Continent.

The development of the oil fields and refining facilities in Montana has also seriously affected the marketing of refined products in these States. Water shipment of refined products from California up the west coast and up the Columbia River shuts Wyoming oils out of a portion of western Montana and Washington, Oregon, and Idaho points. Unfavorable freight rates have also affected the market

for asphalt as at one time California road oil was moved into Laramie, Wyo., at the same rate of transportation as from Casper, Wyo. Evanston is now the point of balance of these rates. A large amount of the fuel oil manufactured by the Big Horn Basin Refiners moved into the Minneapolis territory, but that has now been supplanted by the increased production from new Illinois fields.

REFINING

Mr. LA FLEICHE. Of 45 refineries located in the State, only those operated by major oil interests have modern cracking facilities.

The CHAIRMAN. How many of them are operated by the major interests?

Mr. LA FLEICHE. Well, there is a refinery at Parco; there are three in Casper; there is one in Greybull, one in Lovell, and one in Cody.

The CHAIRMAN. One in Glenrock?

Mr. LA FLEICHE. And one in Glenrock.

The CHAIRMAN. Those are major company refineries?

Mr. LA FLEICHE. Yes; I am told that the Bay is a major refinery. However, I have nothing to substantiate that.

The CHAIRMAN. How many of these 45 refineries are skimming plants?

Mr. LA FLEICHE. All except the ones I mentioned as major refineries.

The CHAIRMAN. In other words, these include, in addition to the eight major plants just listed, practically only the small skimming plants?

Mr. LA FLEICHE. That is correct. There are 37 skimming plants and 8 of the larger cracking.

The CHAIRMAN. And the total output of all of the skimming plants doesn't begin to be as much as that of the eight large plants?

Mr. LA FLEICHE. No.

The CHAIRMAN. Very well.

Mr. LA FLEICHE. Those not possessing such equipment are classed as skimming plants. The majority of the smaller refineries market only third structure gasoline, not having a license to add the tetraethyl lead necessary to raise the octane rating the required amount.

MARKETING OF WYOMING PETROLEUM PRODUCTS

Mr. LA FLEICHE. Wyoming refineries must seek an outlet for their products in adjoining States as Wyoming consumes only about 20 percent of the gasoline manufactured.

With the exception of the southeastern section of the State, there is very little price competition in regular leaded gasolines at the filling stations. Such competition as there is is in service to the consumer and advertisement of the merits of respective brands of gasoline and motor oils.

The CHAIRMAN. Do you know whether or not the smaller refineries have desired to have that license for the use of the tetraethyl lead?

Mr. LA FLEICHE. At one time, as I understand the situation, and I was never in the refining business, so I can't justify this from any personal experience, merely what has been told me; it was very difficult at one time for the small refineries to secure a license for leading gasoline. I think within the last 2 or 3 years that condition has been

changed and now it is possible for any refinery to obtain these licenses. The cost, however, is prohibitive for most small plants; not the cost of the lead, but the cost of the necessary equipment to mix the lead. The lead is very dangerous to handle and it requires strict supervision and standard equipment.

The CHAIRMAN. This is a patented process?

Mr. LA FLEICHE. What is that?

The CHAIRMAN. This is a patented process?

Mr. LA FLEICHE. I understand it is a patented process.

The CHAIRMAN. Do you know who owns the patent?

Mr. LA FLEICHE. I have been told it is held jointly by the General Motors and Universal Oil Products Co. I believe those are the two.

The CHAIRMAN. What is the Universal Oil Products Co.?

Mr. LA FLEICHE. I couldn't answer that question.

The CHAIRMAN. You don't know who owns that?

Mr. LA FLEICHE. I don't know who owns that.

Senator KING. Has it been demonstrated to the satisfaction of chemists, if you know, and of the users of gasoline, that this product which is patented is superior and if so to what extent?

Mr. LA FLEICHE. Well, Senator, that is a very difficult question to answer. I will say this, however, that in modern high-compression internal-combustion engines such as are used in the modern automobile, the addition of lead or some other compound to reduce the detonation rate or reduce the tendency of the engine to knock under load makes it necessary that there be a gasoline that will prevent that.

In other words, you are getting a greater efficiency out of leaded gasoline than you are out of the ordinary gasoline, and there are other processes; some of them I understand are in the state of development, that will possibly eliminate the use of lead, but at the present time the addition of lead to gasoline makes a much better motor fuel for the ordinary modern automobile than the fuels without lead in them. Now the question as to whether or not the addition of this lead to make, say, 70 octane gasoline is worth 2 cents a gallon more, I couldn't answer that question.

The CHAIRMAN. You may proceed.

Mr. LA FLEICHE. There is, however, severe price competition in sales to large individual consumers of gasoline and fuel oils such as contractors, truckers, municipal light plants, and so forth. There has been much criticism of the gasoline price to the average consumer in Wyoming as the consumer cannot understand why gasoline prices are higher at the point of manufacture than in States to the east and south that have few oil fields.

The retail prices in States bordering on the north and west are similar to those prevailing in Wyoming. The refiners maintain that the higher prices prevailing in Wyoming are necessary to enable them to maintain a balance with the sales price in competitive territory, and thereby maintain an adequate plant throughout. Whether the prices are too high or not is a moot question and against this must be carefully weighed the possibility that the saving to the consumer in reduced prices will be offset by further refinery curtailment or a drastic reduction in the price paid for crude petroleum. It is very probable that the competition now existing in the southeastern part of the State will rapidly expand over the entire State due to the increase of cheap truck transportation and force prices down.

Another factor in the high gasoline price situation is the dealer margin which will average from 4 to 5 cents per gallon against an average of about 3 cents in the low price States to the east and the south. There are now about 1,275 licensed retail stations with an average daily sales of 137 gallons. Each station will employ an average of two men. A reduction in the dealers' margin alone would make cheaper gasoline, but it is a question if such reduction would not also cause a loss of employment of many service-station workers.

The so-called independent has not been a serious factor of competition in Wyoming and the production, transportation, refining, and marketing of petroleum has long been under control of the large integrated interests. The public-land policy and the rapidly increasing cost of well-drilling has a tendency to further concentrate production in the hands of the large companies. However, stiffer competition is appearing in the refining and the marketing branches.

It is my conclusion that of paramount economic importance to the State of Wyoming is the maintenance of a stable and equitable crude-oil price structure. Also of great importance is the careful regulation of pipe-line rates so that the economies of such means of transportation may bring commensurate benefits to the producer and also to the ultimate consumer and not operate solely to the benefit of the transporting agency. The public-land policy should be such as to encourage the leasing and bona fide development and operation of the public lands by the smaller competitive interests.

The CHAIRMAN. You referred awhile ago to the Bureau of Mines estimates, saying that Wyoming does not produce as much as the Bureau has estimated for it. How long has that been the case?

Mr. LA FLEICHE. I don't have any recent figures on that. At the time I investigated that, that had been the case up to about a year ago.

The CHAIRMAN. For how long a period back?

Mr. LA FLEICHE. For, I would say, several years.

The CHAIRMAN. What is the reason, if you know, why the State, with apparent capacity to produce, has not contributed as much to the national crude-oil market as the Bureau of Mines has estimated for it?

Mr. LA FLEICHE. It simply hasn't had the market outlets for its crude oil. I believe that the construction of trunk pipe lines will now relieve that situation, and it may possibly make a balance in the other direction, but as long as we were dependent primarily upon movement of crude oil out of the State by means of the rail, there was little chance for overproduction.

Senator KING. Then you assume there will be some benefit to the producer of crude oil in Wyoming if there is a larger demand beyond the boundaries of the State for the crude production in Wyoming?

Mr. LA FLEICHE. Yes; I do.

Senator KING. Whether that increased consumption beyond the borders of the State of crude oil results from cheaper railroad rates or cheaper pipe-line rates or cheaper trucking rates, whatever will result in finding a wider market for your crude oil will be advantageous to the State.

Mr. LA FLEICHE. Very much so; yes, sir.

Mr. O'CONNELL. Would you say that so far as the pipe-line transportation is concerned that it would depend on cheaper cost of trans-

portation by pipe lines or cheaper rates of transportation by pipe line?

Mr. LA FLEICHE. Well, I believe that the costs of pipe-line transportation are lower than any other means, with the exception of water shipment.

Mr. O'CONNELL. So I understand, but I also understand in some areas the rates for transportation by pipe line are equal in many cases to the transportation by rail, so the benefits that you envisage might depend somewhat upon the rate structure rather than upon the actual cost.

Mr. LA FLEICHE. Yes; I see no justification in any instance for a pipe-line rate to a certain point as great as the rail rate to that point. In other words, there is no justification for construction of a pipe line under those circumstances. They are simply taking business from the existing transporting agency.

Senator KING. That is to say, if the railroads furnish adequate transportation facilities for the crude oil, and furnish them cheaply enough, there is no reason for the construction of pipe lines, but if their rates are too high, then there is a justification for trucking or pipe lines.

Mr. LA FLEICHE. There is one item in favor of the pipe line other than the cost of transportation, that is the loss of oil in handling. It is necessary to handle the oil several times in rail transportation and there is loss by evaporation, there is a greater hazard there, and the movement isn't as continuous or as speedy.

Senator KING. There are advantages then in the utilization of a pipe line as against trucks or as against railroads in the transportation, particularly over a long distance.

Mr. LA FLEICHE. I beg your pardon.

Senator KING. There are advantages, are there not, in economy as well as in other respects, in having a pipe line available for the conveying of your oil as against a railroad or trucks?

Mr. LA FLEICHE. The pipe line is the normal, economic method of transporting crude petroleum.

Senator KING. There would not have been such large sums expended in the construction of pipe lines if there had not been economic advantages resulting from them.

Mr. LA FLEICHE. That is correct; yes.

Senator KING. Economic advantages to the public at large as well as to those who are engaged in the production, manufacture, and disposition of oils and their products.

Mr. LA FLEICHE. The pipe line is indispensable to the oil business, and it has contributed greatly to the low price of gasoline to the consuming American public.

The CHAIRMAN. What suggestions do you have with respect to this recommendation that you just made about the public-land policy and the encouragement of smaller competitive interests?

Mr. LA FLEICHE. I believe that there are certain features in the present public-land policy that tend to inhibit the smaller interests from acquiring public lands for purposes of development and operation. I believe that those things can be very easily removed. I think that the removal would result not only in benefits to the small oil man, but also in benefits to the Government.

The CHAIRMAN. What are they, specifically?

Mr. LA FLEICHE. For instance, I have no objection to the law under which these public laws are administered.

The CHAIRMAN. You mean the Oil Leasing Act?

Mr. LA FLEICHE. The Oil Leasing Act, but under the regulations, for instance, the cost of acquiring these lands is a rental of 50 cents an acre for the first year, and thereafter a rental of 25 cents an acre. This rental, insofar as Wyoming rents are concerned, I believe is excessive. The lands are not worth that for the purpose of exploration. If that rental were 10 cents an acre, I believe that the Government would probably lease 10 times more land.

The CHAIRMAN. Would you say that a high rental of that character tends to handicap the small independent operator?

Mr. LA FLEICHE. Yes; I would.

The CHAIRMAN. And your opinion is that it would be beneficial to the State and to the petroleum industry if the Government by reducing the rental should invite the small operator into the field?

Mr. LA FLEICHE. Yes; it is.

Senator KING. It would be disadvantageous, however, to the small operator if by this reduction it were possible for the large, the major companies to secure larger holdings.

Mr. LA FLEICHE. Well, I understand there is a limitation by law, isn't there, on the amount of acreage the larger companies may get?

Senator KING. Yes; but I am assuming that if your thesis is supported, it would postulate that the larger companies should not derive advantages to the disadvantage of the independents.

Mr. LA FLEICHE. No. The larger companies would derive some advantage by virtue of the reduced rental, yes; but not to the disadvantage of the small operator. They would both get it.

Senator KING. I am in sympathy, if I may say so, with the view expressed by Senator O'Mahoney. I think that so far as we can, without discrimination or unfairness, and with due regard to the public interest, we ought to encourage the small man, the independent, to develop the oil resources, as well as the mining resources of our country.

The CHAIRMAN. Are there any other questions?

You have no questions?

Mr. SNYDER. No, sir.

The CHAIRMAN. Do you have anything to add to the statement, Mr. La Fleiche?

Mr. LA FLEICHE. I also think in the matter of leasing of public lands, a benefit to the small oilman would be the elimination of the \$1,000 corporate surety bond required on the execution of the lease. I can't for the life of me see any particular need for it.

The CHAIRMAN. I may say some of us have been urging that upon the Department of the Interior.

Mr. LA FLEICHE. If there were any specific need for the bond it would be a different matter. Also, under the leases that are issued, a \$5,000 bond is required upon the commencement of drilling operations. It would seem to me that it would be in the interest of conservation if that bond could be commensurate with the nature of the proposed development. In other words, to the Government there is much more risk or much more chance of damage in a 10,000-foot well than in a 500-foot well. You ask for a \$5,000 bond on a 500-foot well or a 10,000-foot well, it makes no difference. If that bond could

be adjusted to suit in a general way the individual requirements, for instance if there is an operator over here who is getting production from a sand at, say, 300 feet, those wells would make a half barrel or maybe 2 or 3 barrels, and if he has to put up a \$5,000 bond it shuts him out of the picture. If he could put up, say, a bond commensurate with the amount of protection the Government would require in an undertaking of that nature, then he could go ahead and develop these small reserves that are of no interest whatsoever to the large operator, but nevertheless do furnish employment and contribute to the oil taken from the ground, they add to our resources, and I think that the picture would be much more flexible than it is at the present time.

Senator KING. I would like to ask about adopting a policy that would preserve for a period beyond this generation some of our oil reserves. I was very much interested in the exposition made by the representative of the oil interests from Texas; it seemed to me that the proration system there had its advantages, it prevented great gushing of oil far in excess of the demand. You speak about there being smaller pools, smaller reserves, that might be worked by smaller producers. Have you thought of the fact that it might be wise in view of the fact that we are producing more oil than there is a demand for, to hold in reserve some of these oil pools and oil fields and not encourage an overexpansion and overdevelopment?

Mr. LA FLEICHE. I thought about that a great deal myself. Senator, and the matter of the desirability of shutting in fields as reserves. We do in Wyoming because we just simply can't find the market for it, but with a Nation that is consuming well over a billion barrels of oil a year, with an estimated 12 to 15 or 16 years' supply of oil in sight, that is, discovered reserves, it seems to me we can't lag too far behind in the discovery of fields.

The CHAIRMAN. You spoke about the sum of royalties received by the United States on public lands in Wyoming. Have you a comparable figure on the royalty received by the State from the operation of State oil lands?

Mr. LA FLEICHE. Yes; that figure was \$18,000,000.

The CHAIRMAN. I overlooked that. Is that the total amount received by the State of Wyoming from the leasing of its lands?

Mr. LA FLEICHE. At the date of that——

The CHAIRMAN (interposing). The preparation of this table?

Mr. LA FLEICHE. Yes, sir.

The CHAIRMAN. Do you have any figures showing the way that has been divided among the counties?

Mr. LA FLEICHE. No; I don't have the figure.

The CHAIRMAN. The State law provides for distribution to the school districts and also for the construction of roads throughout the State. Have you anything to add to your statement with respect to the likely trend of the price of crude, or what could or should be done about it, if anything?

Mr. LA FLEICHE. I don't know what can be done about it except I do believe in the regulation of pipe lines and a very definite assurance had as to the cost of this transportation. I understand that on the pipe line that is being constructed from Lance Creek to Salt Lake City, no tariff has yet been posted. At the same time, they have said what they would pay for the oil. It would seem

to me that the costs of carrying, the charges to the refinery for transporting this oil, would be a factor that should be known first.

Senator KING. May I ask where there are so many geological considerations to be taken into account and that would be involved in the construction of a pipe line for hundreds of miles, can you determine in advance what the tariff should be? You encounter faults, you may encounter formation that would be very difficult to penetrate, and the cost of driving your tunnel and making the necessary ditch for the pipe line would be very much greater than in a different formation. Therefore you can't tell what the tariff should be. Perhaps you can approximate the cost of the construction of the pipe line from the oil field to Salt Lake City.

Mr. LA FLEICHE. They have had sufficient experience at the present time in the construction of pipe lines to know very closely what those costs ought to be, and with the exception of about 70 miles, practically all of this territory is at the present time traversed by one type of pipe line or another. For instance, there is a gas line that runs from South Baxter Basin into Salt Lake City, so they know what those conditions are. There is a pipe line from Lance Creek to Denver, and a portion of this line will parallel that line. They know what those conditions are.

The CHAIRMAN. Mr. La Fleiche makes the interesting point that a 6-year contract for the sale of oil to be transported through this pipe line was made at a fixed price before the transportation tariff was announced.

Mr. LA FLEICHE. That is correct.

Senator KING. That may be to the advantage of the Salt Lake Co. or to its disadvantage, depending upon the uncertainties that it encounters in the construction of the pipe line, the cost, and so on.

Mr. LA FLEICHE. I don't know what the set-up is on this pipe line, but I understand the pipe line is being constructed by the Stanolind Pipeline Co.

The CHAIRMAN. I see Mr. Ferguson in the audience, and I wonder if he would care to comment on that point.

Mr. FERGUSON. When that contract was made we were not particularly interested in what rates they would publish. We had our own estimates of the cost of transportation. We had built pipe lines ourselves—when I say “we” I mean the Continental Oil Co.—and we had some idea of what a 500-mile line would cost. We had some idea of the volume that they would run through the line and what the operating cost would be. We knew something about the market in which they had to sell their products, and we took all of those factors into consideration in determining what we thought was the best price they could pay for crude. As I said this morning, conditions may change. We may have a prolonged war and prices of all kinds would be shot to pieces. Whether we made a good deal or a bad one I don't know, but we thought at the time, taking all of those factors into consideration, that that is all they could afford to pay.

The CHAIRMAN. Have you anything more to add?

Mr. LA FLEICHE. No, sir.

The CHAIRMAN. Are there any further questions?

The committee is very much indebted to you, Mr. La Fleiche. The committee will stand in recess until tomorrow morning at 10:15, when Mr. Schuch will be the witness.

I shall file for the record of the committee the transcript of a hearing which was held before the attorney general of Wyoming on September 12, 1939, in an inquiry made by the attorney general of the State into the price of gasoline; and, for inclusion in the record, I offer a letter and two charts I have received from the Department of the Interior relating to accretions to the Reclamation Fund.

(The transcript of the hearing referred to was marked "Exhibit No. 1299" and is on file with the committee. The letter and charts referred to were marked "Exhibit No. 1300" and are included in the appendix on p. 9840.)

(At 4:05 p. m. the committee recessed until 10:15 a. m. on Wednesday, October 18, 1939.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

WEDNESDAY, OCTOBER 18, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:30 a. m., pursuant to adjournment on Tuesday, October 17, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman) and Representative Sumners (vice chairman); Senator King; Messrs. O'Connell, Lubin, and Brackett.

Present also: Representative Mapes (Michigan), Edward C. Eicher, and Quinn Shaughnessy, representing the Securities and Exchange Commission; Clarence Avildsen, representing the Department of Commerce; W. B. Watson Snyder, Hugh Cox, F. E. Berquist, Christopher Del Sesto, special assistants to the Attorney General; Roy C. Cook and Leo Finn, Department of Justice.

The CHAIRMAN. The committee will please come to order. Mr. Schuh, will you be good enough to be sworn?

Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. SCHUH. I do.

The CHAIRMAN. You may be seated. The chairman understands that you desire to present a prepared statement before subjecting yourself to questions?

Mr. SCHUH. Yes, sir.

The CHAIRMAN. That will be quite agreeable. You may proceed.

TESTIMONY OF WILMER R. SCHUH, CHAIRMAN, BOARD OF DIRECTORS, NATIONAL ASSOCIATION OF PETROLEUM RETAILERS, MILWAUKEE, WIS.

Mr. SCHUH. My name is Wilmer R. Schuh, of Milwaukee, Wis. I am appearing before the committee as an individual, at my personal expense, in response to a subpoena, to answer certain charges made against me in testimony before the committee on October 12, 1939.

I operate a gasoline service station. That is to say, I sell at retail to automobile owners gasoline which I buy from suppliers. At the present time I sell Mobilgas. Until a few months ago I sold Barnsdall gas. In no one year has my income exceeded \$1,000 a year. I have no other income. I am probably what people would call a small independent dealer.

My filling station is located at 136 North Water Street, Milwaukee, Wis. I entered the business in April 1931. Prior to that time I was

a salesman of service-station supplies and equipment. My station is not owned, leased, or controlled directly or indirectly by any major oil company or other supplier. For more than 5 years I have not had a sales agreement or contract with any supplier. I have never been associated with any major oil company, nor have I ever received compensation of any sort from an oil company or an oil-company official. I do not own a share of stock or any interest in any oil well or oil company.

I am a member of the Retail Gasoline Dealers Association of Milwaukee, which is a member of the Retail Gasoline Dealers Association of Wisconsin. This association is, in turn, a member of the National Association of Petroleum Retailers. I am one of the charter members and past treasurer of the Milwaukee Association, past president of the Wisconsin Association, and a former member of the Wisconsin Code Committee. I was appointed to the Planning and Coordination Committee for the Petroleum Code by President Roosevelt. I was elected secretary of the Midwest Code Conference, which office I still hold. I am a member of the national committee of three appointed by the Midwest Code Conference for furthering the Federal Trade Commission Code. At the present time, I am chairman of the board of directors of the National Association of Petroleum Retailers, an office which I have held since September 14, 1939. Prior to that date, I was president of the National Association of Petroleum Retailers, an office to which I was elected in October, 1934, 1935, and in 1936 for 3 years.

AIMS AND ACTIVITIES OF THE NATIONAL ASSOCIATION OF PETROLEUM RETAILERS

Mr. SCHUH. The National Association of Petroleum Retailers is an association whose membership consists solely of retail oil dealers. The present active membership does not exceed 10,000 dealers, or less than one-fortieth of the total number of retail dealers. No supplier is, or can be, a member of the association. No station which is operated by a major oil company or a jobber is permitted membership in the association. The association is not subsidized, directly or indirectly, by any major oil company, or any other supplier. It has no connection of any description with the American Petroleum Institute, or with any organization of oil producers or suppliers.

The National Association was formed in July 1933 for the purpose of giving small retailers adequate representation in formulating the Petroleum Code. To this end, it opposed on the one hand, the price-fixing proposals of the Federal Government, and on the other the pooling and marketing agreements proposed by the industry; and finally obtained a 1 cent margin increase for the retailer during the code period. Its principal purpose is to bargain collectively for the independent dealer or retailer. What we are trying to do is to get him enough profit to live on. The association necessarily champions the cause of the small retailer. Among other things, it fought, successfully, for the adoption of the Iowa plan for taking the major oil companies out of the retail business. It sponsored proposed legislation in Wisconsin to separate completely wholesaling and retailing of petroleum. It has obtained revision of leasing agreements so that they no longer can be canceled on a 24-hour to 30-day notice, but are

on a yearly basis. It has obtained from one major company a franchise, or zoning, system for placing stations to prevent overbuilding. It has consistently approved open-price posting as opposed to secret price and secret rebates. This is necessarily a very incomplete list, but it illustrates my point that the association has been working, and is still working, to improve the condition of thousands of small operators in the retail industry.

On October 12, 1939, Mr. L. A. Hartley, secretary of the Petroleum Retailers Association of Kansas City, and Mr. A. W. Hewett,¹ president of the same association, appeared before this committee and made certain charges of misconduct which directly affect me. These charges were presented in the form of a written statement, which purported to be a stenographer's report of a meeting between myself and eight representatives of the Kansas City association on January 19, 1939. This so-called stenographer's report, however, is not a transcription of what I said, or what anyone said, at that meeting. It is not even a statement of fact. It is a statement of the conclusions of a stenographer and signed by some, but not all, of the persons present as to what was said at the conference. It attempts to summarize, in two paragraphs, what was said in a 5-hour discussion between nine men. At least two of the representatives of the Kansas City association refused to sign the statement. The stenographer who supposedly prepared it, while concealed in another room, did not sign it or attest its veracity. Of course, I was given no opportunity to see it or comment upon it, before it was presented to this committee.

Before I come to the substance of this document, I would like to point out that the whole procedure followed by these men—the concealment of a stenographer in an adjoining room, the secret preparation of a report, and its equally secret transmission to the Federal Government—indicates more clearly than I can, the character of the men who are making the charges. They appear to be more interested in sensational publicity than in sticking to the facts. The whole thing sounds more like conspirators in a small-time melodrama than like sober businessmen considering the problems of the retail oil business. I submit that this suggests why the Kansas City association, under its present leadership, has been the source of so much concern to the national association, and the reason for the meeting which occurred on January 19.

I wish to state here, unequivocally, that every one of the so-called conclusions of the discussions are erroneous, and contrary to fact.

The charges made by Mr. Hartley may be summarized as follows:

(1) That I threatened to revoke the charter of the Kansas City association, and to organize a rival association.

(2) That I laid down the following conditions for retention of their charter from the national association:

(a) Cease opposition to major oil company marketing methods.

(b) Cease publicizing major oil companies as monopolistic.

(c) Cease offers to appear before the Senate Monopoly Committee.

(d) Cease offers of legal aid to members who feel themselves unfairly dealt with by major oil companies.

¹ See testimony of these gentlemen in Hearings, Part 16.

(e) Cease giving voluntary information to the Department of Justice involving major oil companies.

(f) Recognize Government indictments at Madison as the cause of the widespread demoralization of the retail gasoline market.

(g) Observe a certain formula for fixing upward or downward prices of gasoline.

(3) That I was supported and encouraged in the foregoing program by the major oil companies.

I am amazed that anyone could take away from the meeting the impression conveyed by this statement. I did not threaten the Kansas City organization, nor did I impose the conditions stated, nor did I contend that the major oil companies were backing me up or advocating any such program. And very emphatically, I did not threaten Mr. Hartley or anyone else if they testified before this committee.

The meeting was called at my suggestion to discuss certain policies of the local association which I considered to be in violation of the bylaws of the national association and injurious to the best interests of retail oil dealers generally. The policy and bylaws specifically provide that all intraindustry complaints (price structure, marketing conditions, and so forth) should first be presented to the national association for approval or for action before they were presented to the public or to the Government for legislation. This policy was approved by the Kansas City organization when it accepted its charter. Nevertheless, Mr. Hartley and the group he represented had persistently ignored it. For example, as Mr. Hartley testified, he prepared and published without consulting us a pamphlet entitled "Facts About the Kansas City Price War," which savagely attacked the price structure of the industry and particularly the major suppliers. He was also publicly threatening to ask for a Federal grand jury investigation of the Kansas City area. Now, however one may feel about the major suppliers—and there are naturally differences of opinion—Mr. Hartley's repeated attacks on the industry were causing retail dealers much embarrassment and doing our efforts to reduce the suppliers' margin no good. So far as I was concerned, the one issue, and the only issue at the meeting, was whether such complaints should be presented directly to the national association or whether Mr. Hartley should continue to "go off on his own hook."

I did not threaten to revoke the Kansas City charter. Mr. Hartley knew, and everyone present at the meeting knew, that I had no authority to revoke their charter. Charters are granted and revoked by the board of directors of the national association. Recommendations to revoke a charter are presented by the Ways and Means Committee, of which I was not a member. I did caution the group that violation of the bylaws was a cause for revocation of their charter, which would automatically come before the Ways and Means Committee in due course. I delivered no ultimatum of any kind. Mr. Hartley wanted to take a vote immediately to determine whether they should continue in the association or give up their charter. I dissuaded them, stating that they should think over my position and Mr. Hartley's position, and that the matter would be discussed further before the Ways and Means Committee in 30 or 60 days.

In the course of a 5-hour meeting, a great many things were discussed. To the best of my recollection, my statements with respect to the matters mentioned in Mr. Hartley's charges were as follows:

(1) "Cease opposition to major oil company marketing methods."

I did not, and could not possibly have made such a statement. The national association, and I, personally, have consistently opposed many of the oil companies' marketing methods. As I have already stated, we fought the major oil companies to get the "Iowa plan." We have fought and obtained concessions from the major companies on leasing agreements and overbuilding. We have consistently opposed efforts of major oil companies to dictate retailers' prices. I have made several speeches on this subject, which are available to anyone. There are many other instances, too numerous to mention here.

(2) "Cease publicizing major oil companies as monopolistic."

The point I was making and emphasizing was that what Kansas City dealers needed more than anything else was a lower tank-wagon price, and that they could not expect reductions from suppliers if they persisted in publishing attacks upon them.

(3) "Cease offers to appear before the Monopoly Committee."

My only recollection of any conversation on this point was that Mr. Hartley said he intended to appear before the committee. I told him that I also expected to appear. I also stated that I did not think it would get us anywhere if he went to Washington with the same baseless complaints which he had been publishing. I did not tell him not to appear, and it is ridiculous for him to say that I threatened to take away their charter if he did appear.

My willingness to be of assistance to this committee in every possible manner was stated by me, before I ever met Mr. Hartley, to your Mr. Scannell¹ a year ago. I quote from my prepared and signed statement made at the request of Mr. Scannell at that time (reading):

I regret that time does not permit me to go into many of these subjects more in detail, but I shall be very willing to do anything I can in my capacity to assist the National Economic Committee in its endeavor to aid business in the United States.

(4) "Cease offers of legal aid to members who feel unfairly treated by major oil companies."

This is another statement I did not make. We urge all of our associations to employ legal counsel so that assistance can be given to dealers when they are in trouble. That is a function of any good trade association.

(5) "Cease giving voluntary information to the Department of Justice."

As I have already stated, I indicated that if they wanted to complain to the Department of Justice, or anyone else, as to problems

¹ George H. Scannell, attorney with the Federal Trade Commission, which is represented on this committee.

arising in Kansas City, the rule of the national association was that they should come first to us, and then, if we couldn't help them, they were free to make their complaint elsewhere. But where any member of our organization has reasonable grounds to believe there has been an actual violation of law, there is no rule of our organization which opposes a direct approach to the Department of Justice. On the contrary, our association approves a direct report to the Department of Justice. In fact, our association made a formal complaint in 1935 of what we had reason to believe was an illegal conspiracy by certain major oil companies to injure their competitors.

(6) "Recognize the Madison indictments as the cause of the present demoralization of the retail market."

It is my personal opinion that the Madison indictments have adversely affected dealers in Kansas City and elsewhere, since the companies have ceased taking distress gasoline off the markets, with the result that markets sagged and cut-rate dealers benefited. I expressed this opinion, but I did not recommend any course of conduct to them in connection with it.

(7) "Observe a formula for fixing upward or downward retail prices of gasoline."

This is simply the "N. A. P. R. formula" for allocating between the supplier and dealer the spread between tank-car price and the retail price. It computes the supplier's cost as 1 cent and the dealer's cost as 3 cents, and suggests that they should share equally in any excess margin. The formula is intended as a basis for negotiation between individual dealers and their suppliers. If accepted, it would cut substantially the present supplier's margin and enable the dealer to drop the retail price to meet cut-rate competition without selling below cost. The basic assumption of the formula is the tank-car price, but Mr. Hartley is entirely mistaken that acceptance of the formula forecloses him, or the national association, from attacking the tank car price if conditions seem to require it. At the present time I do not think they do.

Finally, Mr. Hartley charged, in effect, that I am in league with major oil company officials; that I represented at the meeting that conversations with these officials had convinced me that the Secretary of the Kansas City association was in disfavor with them and that the "conditions" quoted above were identical with major oil company demands. This is a misstatement, with no foundation in fact. Mr. Hartley asked me if I knew any major oil company officials and I stated that I did. I knew them from my work in Washington, as a representative of the retail dealers, in connection with the Oil Industry Code and fair practice rules. I knew them also because it was my business to bargain with them as president of the National Association of Petroleum Retailers. Usually we were on opposite sides of the fence, and I have fought them tooth and nail on many occasions, as many of them will testify.

I may have stated to the meeting that the Kansas City situation was distasteful to major oil company officials. It would be hard to imagine any other reaction on their part in view of Mr. Hartley's repeated public attacks upon them. But I certainly did not state that any official of any oil company had laid down conditions for the Kansas City area or had approved any plan of mine for dealing

with the local association. Mr. Hartley's statement specifically mentions Mr. L. L. Marcel, of White Eagle. I have had infrequent telephone conversations with Mr. Marcel on occasions when I was in his territory. I have never met him personally, and do not know him well. On the only occasion on which we ever discussed the Kansas City association, his only remark to me was that he "thought it was a situation the dealers in Kansas City should work out for themselves." Apart from this there is no basis whatever for the assertions contained in Mr. Hartley's statement.

I believe that I have covered the charges made by Mr. Hartley and his associates. I regret that his erroneous impression that the national association and the oil companies are trying to "exterminate" him has gained such wide currency and has occupied so much of the time of this committee. The national association has a tough job on its hands trying to bring some order out of chaos in the highly disorganized retail field, a condition which has existed since the major oil companies withdrew and left the field wide open. The situation in Kansas City is not unique. It is paralleled by many other markets. Unquestionably I am not qualified to discuss the economics of the situation, but I do think that the efforts of Mr. Hartley and his associates to shift the blame to other shoulders are not helping but hurting attempts to solve the problem, both by our national organization and by small retailers everywhere.

The CHAIRMAN. Mr. Cox, have you any questions?

INCOME OF THE ASSOCIATION

Mr. Cox. Yes. Mr. Schuh, does any part of the income of your association come from the major oil companies?

Mr. SCHUH. The only part of our income that comes from any oil company or any supplier is in connection with the sale of this book,¹ and I would like to present each member of the committee with the book that you may see what it is.

The VICE CHAIRMAN. Can't you just tell us in a word or two? We haven't time to read them.

The CHAIRMAN. Those will be distributed, Mr. Schuh.

Mr. SCHUH. I believe that I will have to explain the nature of this book and how it was prepared and who prepared it. This is a book that was first worked on in April or May of 1936 and for the next 2 years was in the process of compilation and preparation. It was finally printed in April of 1938 and this is sold to dealers, suppliers, in any library, schools, universities—anyone that wants to buy this; they are sold by our organization at retail for \$2.50. In larger quantities the price drops until it gets down to \$1.25 or half price in lots of 500 or more, and we have sold these very widely. I believe there are 25,000 that have been sold.

Mr. Cox. How many of those 25,000 have been sold to the major oil companies, Mr. Schuh?

Mr. SCHUH. I wouldn't be able to answer anywhere near correctly.

Mr. Cox. Can you give us an approximate figure?

Mr. SCHUH. No; I can't even approximate it. I haven't the figures here and I don't know the figures. Our records would show that very clearly.

¹ The book, entitled "Service Station Manual," and published by the National Association of Petroleum Retailers, was not introduced for the record.

Mr. Cox. If I should suggest to you that by far the greater part of them were sold to the major oil companies, would you accept that suggestion?

Mr. SCHUH. I think that would be true.

Mr. Cox. Some of the major oil companies buy rather large numbers, don't they?

Mr. SCHUH. Some don't buy any.

Mr. Cox. I realize that; but some of them buy a lot, don't they?

Mr. SCHUH. That is right.

Mr. Cox. Now, can you tell us, for example, last year what part of your income of the association came from the sale of these books?

Mr. SCHUH. No; I can't; I don't have the figures.

Mr. Cox. It is true there again, isn't it, that by far the greater part of your income—

Mr. SCHUH (interposing). Well, it has been the sustaining feature of our organization.

Mr. Cox. In other words, it is the sale of these books that keeps you alive. Is that correct?

Mr. SCHUH. The sale of the books and similar services.

The VICE CHAIRMAN. Mr. Cox, what about similar services?

Mr. Cox. I am going into that. Do you care to tell the committee what it costs you to prepare this book?

Mr. SCHUH. The actual printing, that is the original preparation—what I am talking about now is the actual printing—is somewhere in the nature of 42 cents a book. The preparation of the book itself entailed considerable amount of time and effort and money, and I would say that that would add enough to the book to bring the cost up to somewhere around 68 or 70 cents. I want it clearly understood that that is an estimate of mine, but I sincerely believe it would be fairly close. It might be a little higher, but I don't think it would be any lower.

Mr. Cox. You say you sell some of these books in large quantities for a price as low as \$1.25. Is that right?

Mr. SCHUH. That is right.

Mr. Cox. And some of them are sold singly or in smaller quantities for a higher price?

Mr. SCHUH. That is right.

Mr. Cox. And that price is sometimes as high as \$2?

Mr. SCHUH. \$2.50.

Mr. Cox. \$2.50. So that the difference between the price of \$2.50 or \$1.25, as the case may be, and 60 or 70 cents is the net return on the book. Is that right?

Mr. SCHUH. That is right.

Mr. Cox. Mr. Schuh, who is Carl C. Hodges?

Mr. SCHUH. Carl C. Hodges up until a week ago was executive secretary of the Illinois Association of Petroleum Retailers, an affiliate of ours in Illinois, and today he is executive vice president of the national association.

Mr. Cox. Did he hold any position with the national association in September 1939? Is that the same position he holds today? I am sorry. I withdraw that. I will put it this way. You said a moment ago that today he is executive vice president of the national association. Did he hold that position in September of this year?

Mr. SCHUH. Unfortunately I had to leave the final meeting of the

board of directors to make a talk before the Drake University commerce students and I wasn't at the final session but I understand that he was selected at that session as executive vice president.

Mr. Cox. So that in September he would have held that position.

Mr. SCHUH. I don't think he took active office until about a week ago.

Mr. Cox. Mr. Schuh, we found in your files what purports to be a carbon copy of a letter written by Mr. Hodges dated September 26, 1939, to Mr. J. R. Connery, 4902 Washington Avenue, Houston, Tex. I ask you to look at this letter and to tell the committee first whether in your opinion it is a correct copy of a letter which Mr. Hodges wrote, and, second, whether in your opinion at that time he was probably acting as executive vice president of the association.

Mr. SCHUH. I can't identify this letter because I have never seen it before.

Mr. Cox. Can you account for its being in your files, in the files of the association?

Mr. SCHUH. No; I have not been active since I retired as president in September of this year to go back to my own station and take care of it because it was in such shape, so I have spent no time in the office since then.

Mr. Cox. You have no way of knowing whether in fact that is a letter by Mr. Hodges?

Mr. SCHUH. I could not honestly identify it.

Mr. Cox. Is there anyone here who could identify it?

Mr. SCHUH. Whether our office manager could or not, I don't know.

Mr. Cox. Is she here?

Mr. SCHUH. Mrs. Loos is here.

Mr. Cox. I shall ask you or your counsel to submit the letter now to Mrs. Loos, if you will, and ask her if she can identify it.

The CHAIRMAN. Is Mrs. Loos here?

Mr. Cox. I think she is.

The CHAIRMAN. Let her be sworn, too.

The CHAIRMAN. Mrs. Loos, will you please be sworn?

Do you solemnly swear that the testimony that you give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mrs. Loos. I do.

TESTIMONY OF MRS. MARY C. LOOS, OFFICE MANAGER, NATIONAL ASSOCIATION OF PETROLEUM RETAILERS, MILWAUKEE, WIS.

Mr. Cox. I call your attention to the initials at the bottom of this carbon copy, "CCH:L" and I ask you if the "L" stands for Loos?

Mrs. Loos. Yes.

Mr. Cox. Does that mean you typed this letter?

Mrs. Loos. Yes.

Mr. Cox. Was the text of the letter dictated to you by Mr. Hodges?

Mrs. Loos. It wasn't dictated. He wrote it and I copied it.

Mr. Cox. He wrote it out in longhand and you copied it?

Mrs. Loos. Yes.

Mr. Cox. So it is Mr. Hodges' letter, is that correct?

Mrs. Loos. That is right.

Mr. SCHUH. I think one question ought to be asked in fairness to the Association that hasn't its counsel here, as to whether the letter was authorized or not.

The CHAIRMAN. One step at a time. The question is, was it written? Apparently it was written. Are you going to read the letter, Mr. Cox?

Mr. Cox. Yes; I am going to read it.

The VICE CHAIRMAN. Who wrote the letter?

Mr. Cox. The letter was written by Carl C. Hodges, executive vice president of the National Association of Petroleum Retailers.

Senator KING. Would you deny the authority of Mr. Hodges to write a letter relating to the business of the association?

Mr. SCHUH. Looking at that letter, I would deny that I had any part in this letter.

Senator KING. I didn't ask you that. Would he have the authority to speak for the organization? Were his duties so defined that he would be authorized to write a letter of this character, or would he have to submit it to the Board before he circulated it?

Mr. SCHUH. I believe a letter of this kind would have to be submitted to the committee on ways and means before he sent it out.

Senator KING. That is, if he sent it out without submitting it to the committee on ways and means you think he exceeded his authority?

Mr. SCHUH. I would say so.

Senator KING. What are the duties of the executive vice president?

Mr. SCHUH. The copy of the bylaws would state definitely what those duties are, but I would say offhand that he is to carry into execution the orders of the board of directors and any committees properly selected. He takes, in effect, the place of the president and handles the work of the president.

Senator KING. While the president is present or in his absence, which?

Mr. SCHUH. In his absence.

Senator KING. What position do you have at this time?

Mr. SCHUH. I am chairman of the board of directors.

Senator KING. You are not the president?

Mr. SCHUH. I am not the president.

Mr. Cox. Now, Mr. Schuh, I am going to read to you portions of this letter,¹ and I ask you to direct your attention to those portions because I shall wish to ask you some questions about them. This letter is addressed to Mr. Joe R. Connery, and it begins [reading from "Exhibit No. 1303"]:

I promised you in Des Moines we would get so much mail in the N. A. R. P. office that it would make your head swim. It is the first shot from me but I think it will prove to you that we are already on the job and not wasting a minute in our effort to go to town in our 1940 convention down in Houston.

I take it the 1940 convention he is referring to is a convention of the organization which it is planned to have held in Houston; is that right?

Mr. SCHUH. Yes, sir.

¹The letter was introduced infra, p. 9453, as "Exhibit No. 1303," and is included in the appendix on p. 9844.

Mr. Cox. The next paragraph of the letter reads as follows:

The first thing we have done is to send a copy of the enclosed letter to each of the writers of the letters which were so nicely bound in that convention booster you brought from Houston. We have figured out a story for you and your buddies to tell those fine oil companies, and we believe that we have a right to be proud of this method of securing help for our convention because we feel, and I know you do, too, that we have something of definite value to offer them for their money instead of just accepting a contribution as an outright gift. Our Service Station Manual, as you know, is not a method of extracting money under false pretenses but is a legitimate method of giving something of equal value for money expended by the oil companies.

I ask you to look at that paragraph, the second paragraph of the letter.

May I have it back, please?

Now I ask you, Mr. Schuh, whether you agree with this statement in here [reading]:

Our Service Station Manual, as you know, is not a method of extracting money under false pretenses but is a legitimate method of giving something of equal value for money expended by the oil companies.

Mr. SCHUH. I could only answer that this way, and that is that the Manual was prepared for two purposes, one to bring before the dealers and to have a manual that would accomplish what many of us have felt was necessary as part of our program, and that is, better education of service station managers, as well as a means of getting it distributed and making it worth while for us to have it distributed; in other words, to make a profit on the thing.

Mr. Cox. Well, it was also devised, was it not, as a method of getting something of equal value for money expended by the major oil companies?

Mr. SCHUH. No; it wasn't. It wasn't devised for that purpose at all. It had a dual purpose and if it was merely a method of extracting money we would have put out a very cheap type of book and let it go at that. We prepared the finest and best manual that we could possibly prepare.

Mr. Cox. You don't agree with Mr. Hodges that it is a legitimate method of giving something of equal value for money expended by the oil companies?

Mr. SCHUH. Absolutely not.

Mr. Cox. It wasn't intended for that purpose?

Mr. SCHUH. It was not intended for that purpose.

Mr. Cox. Although of course it does serve that purpose.

Mr. SCHUH. If it does that, that is incidental.

Mr. Cox. You testified a little while ago that if it weren't for the money that you get from the sale of this manual, your Association would have difficulty in surviving, did you not?

Mr. SCHUH. In spite of the sale of the manual we have had difficulty in surviving and we had difficulty long before the manual was ever put out.

Mr. Cox. You would have even more difficulty if you didn't sell the manual to the major oil companies; wouldn't you?

Mr. SCHUH. We would probably have had to curtail many of our services to our associations.

Mr. Cox. And is it your opinion that the fact that the greater part of your income comes from the major oil companies doesn't influence your judgment or the association's judgment one way or another on these problems that are involved in this industry?

Mr. SCHUH. Not one iota; not one bit! In spite of the fact that the Standard Oil Co. of Indiana bought manuals from us, we went down and knocked their ears down and we will again if the occasion warrants it, and if you don't think we knocked their ears down you ought to see the correspondence that we have on it.

Mr. Cox. Is that true of all the major oil companies? Have you differed with all of them on—

Mr. SCHUH (interposing). We have differed with practically every one of them and we are at present fighting them today because of their insistence on selling to commercial accounts at such a low price that it is taking the business out of our stations.

ACTIVITIES OF OFFICERS OF NATIONAL PETROLEUM RETAILERS ASSOCIATION

Mr. Cox. Of course sometimes the major oil companies have come to you, though, haven't they, Mr. Schuh, in an attempt to get you to suppress or adjust complaints that have been made against them within your ranks?

Mr. SCHUH. No; they have never come to me and asked me to suppress complaints from any place. They have called to my attention at times untenable situations, merely for my information.

Mr. Cox. Who is Mr. R. C. Arnott?

Mr. SCHUH. Mr. C. E. Arnott is vice president of the Socony-Vacuum Oil Co.

Mr. Cox. I am going to hand you a letter addressed to you under date of November 16, 1936, by Mr. Arnott on the letterhead 26 Broadway, New York, and ask you if you received that letter and enclosure.¹

Mr. SCHUH. Yes; I received this letter.

Mr. Cox. That is a letter, isn't it, where Mr. Arnott is complaining about some adverse publicity?

Mr. SCHUH. That is right.

Mr. Cox. He wrote it to you?

Mr. SCHUH. That is right.

Mr. Cox. Do you have any idea why he should think you could do anything about that?

Mr. SCHUH. Because Mr. Arnott and myself from the early days of the N. R. A. Code had worked together on the Federal Trade Commission Code and we had been constantly endeavoring to get a Federal Trade Commission code, and situations like this that I called to his attention and he called to my attention are things that we probably could have ironed out under a code, and he sent them to me for my attention so that I would know what was going on in this particular area and what it was all about.

Mr. Cox. This enclosure which he has here is a four-page document entitled "Pump Handle" and apparently published by the Master Gasoline Association, Inc., Cleveland, Ohio; was it not?

Mr. SCHUH. That is right.

Mr. Cox. And it contained an attack upon the Iowa plan.

Mr. SCHUH. That is right.

Mr. Cox. And Mr. Arnott said to you: "I am wondering why this particular publication cannot be more constructive," in his letter.

¹ Exhibit No. 1301," appendix, p. 9842.

Did you talk to anybody in the Master Gasoline Operators' Association in Cleveland, Ohio, about this publicity?

Mr. SCHUH. Not to my recollection. I would prefer to say "No, I had not."

Mr. Cox. Are you quite sure you didn't?

Mr. SCHUH. I am quite sure I didn't.

Mr. Cox. So that so far as this letter of Mr. Arnott's was concerned it didn't call forth any action on your part?

Mr. SCHUH. May I have that date once more?

Mr. Cox. The date is November 16, 1936.

Mr. SCHUH. No; I am quite sure I didn't, because of the situation that prevailed at that time.

Mr. Cox. You never talked to them at any time after November 1936 about their attacks on the Iowa plan?

Mr. SCHUH. Not to the best of my recollection.

Mr. Cox. Are you prepared to say definitely now that you didn't?

Mr. SCHUH. I have answered to the best of my ability. I say I don't—

Mr. Cox (interposing). You don't remember?

Mr. SCHUH. I don't remember—I don't think I did.

Mr. Cox. I am going to offer this letter from Mr. Arnott and the attached enclosures.

The CHAIRMAN. The letter and the enclosures may be received.

(The letter and enclosures referred to were marked "Exhibit No. 1301," and are included in the appendix on p. 9842.)

Mr. O'CONNELL. Mr. Schuh, as I recall one statement made in your prepared statement it was to the effect that your organization fought the major companies in connection with enforcing the adoption of the Iowa plan. Is that correct?

Mr. SCHUH. Yes, sir; that is right.

Mr. O'CONNELL. Would it not appear from the tenor of the letter just referred to that you at least were not engaged in a battle with the Socony-Vacuum Co., with regard to the Iowa plan?

Mr. SCHUH. No; that wouldn't, because we fought the Socony-Vacuum's local company tooth and nail in Wisconsin and they did everything they possibly could to kill the bill that we had introduced in the State Legislature in Wisconsin to put them definitely out of the retail field.

Mr. O'CONNELL. You didn't quite understand my question. My question was, that it would appear to me from the tenor of the letter received from Mr. Arnott of the Socony-Vacuum Co., that there was no quarrel between Mr. Arnott at least and your organization as regards the adoption of the Iowa plan. Is that correct?

Mr. SCHUH. I think if you put it this way that there was—

Mr. O'CONNELL. Is my statement correct or is it not?

Mr. SCHUH. No; it is not. There was no quarrel between Mr. Arnott and myself.

Mr. O'CONNELL. I said between Mr. Arnott and your organization.

Mr. SCHUH. I wouldn't say that.

Mr. O'CONNELL. You and your organization were not as one as regards the Iowa plan.

Mr. SCHUH. No; we wanted the Iowa plan.

Mr. O'CONNELL. Did you personally want it?

Mr. SCHUH. I wanted it.

Mr. O'CONNELL. Did Mr. Arnott want the Iowa plan?

Mr. SCHUH. Not at the beginning.

Mr. O'CONNELL. Did he want it at the time he wrote that letter?

Mr. SCHUH. He had it.

Mr. Cox. He apparently didn't like attacks upon it at that time.

Mr. SCHUH. The nature of these attacks as I remember that is that the majors forced this thing down their throat. In order to clear this up it takes a little time.

Mr. O'CONNELL. I would prefer not to go into that in detail. I was under the impression from the tenor of that letter that at least at the time this letter was written the Socony-Vacuum as represented by Mr. Arnott were suggesting to you that attacks on the Iowa plan were not desirable.

Mr. SCHUH. I don't believe that that was entirely what he meant. A few words may explain this. The group that published this paper were amalgamated by us a short two or three months before this was published, this particular article was published. It consisted of a radical group over on this side that were known as the Master Gasoline Operators Association, and the Independent Oil Dealers of Cuyahoga County, two groups who had been fighting amongst themselves, and we drew them into a meeting in August and forced an amalgamation in order that the convention might be put on successfully the following month. They both wanted to put it on and they both wanted to go their own way. In the Master Operators there were two or three fellows, including the one that wrote this publication, who was sincere, very sincere, and a very likeable fellow, who just had to have his own way and nothing else would prevail, and the reason that I feel certain I took no action on this is that I knew eventually that the thing would be ironed out and tamed down and they would get together and work together rather than each one going his own way.

Mr. O'CONNELL. I think we are getting quite far afield from the thought that I had when I started. I was merely trying to develop whether the statement made in your statement relative to a fight between your organization and the major oil companies regarding the adoption of the Iowa plan was borne out by this particular letter from Mr. Arnott, and I take it that at least at the time Mr. Arnott wrote the letter he was suggesting to you that attacks on the Iowa plan were undesirable from his standpoint and possibly from yours. Is that correct?

Mr. SCHUH. I believe he suggested the type of publicity was undesirable, not so much as what was being attacked as the type of publicity. At least, that would be my idea.

Mr. Cox. Did Mr. Arnott ever make any contributions to your association?

Mr. SCHUH. Never a penny.

Mr. Cox. Has he ever paid the expenses of any of the members or directors of your association to any of their conventions or anything of the sort?

Mr. SCHUH. No; the only time that Mr. Arnott has ever met with a group of our people was in Detroit in 1935 and we had dinner and I paid the bill and charged it to the Association.

Mr. Cox. Do you get many of these, or have you in the past received any letters similar to the one just introduced in the record from Mr. Arnott?

Mr. SCHUH. I don't think I received very many. There have been situations called to my attention. I believe I received another one from Mr. Arnott relative to the Detroit situation, if my memory goes back, I think I did; I am not positive.

Mr. Cox. Was that another case of criticism of some of the policies of the major oil companies?

Mr. SCHUH. No; in that instance, in the Detroit instance, as I remember it, suits were filed in Detroit against some companies, but I don't think against the Socony-Vacuum and the executive secretary of the Detroit group wrote to all companies complaining and listing a list of complaints. I think Mr. Arnott wrote to me about those and asked me what I knew about it, or something like that.

Mr. Cox. Did you take any action with respect to that situation?

Mr. SCHUH. I had been working on it for months. I think I worked on it for 18 months.

Mr. Cox. What kind of work was that, Mr. Schuh? What exactly did you do?

Mr. SCHUH. Meeting with the group in Detroit, talking to them, and pointing out what was happening to them and their membership, and they just refused to listen to us, and after 18 months they found out that the fellow had just about taken their pants and walked off; I mean they learned that we were right in the beginning in cautioning them against the tactics that this fellow was pursuing.

Mr. Cox. That was the result of those conversations? Did they discontinue the lawsuits?

Mr. SCHUH. No; they lost the lawsuits.

Mr. Cox. Could you tell us who Mr. Girling is?

Mr. SCHUH. Mr. Girling is, I believe, secretary of an organization that never would affiliate with us, with their headquarters in Rockford, Ill., I believe.

Senator KING. May I ask a question there? I didn't hear the testimony of the witness before and perhaps other testimony which was offered would clarify this situation; but for my own information, was it the purpose of your organization to bring all retailers in a given section or in any part of the United States under one organization? And to fight those individuals or groups who did not affiliate with your organization?

Mr. SCHUH. No; our hope was that some day in the distant future we would have all retailers under one man.

Senator KING. In every part of the United States?

Mr. SCHUH. I believe that is the hope of every union or organization, to get as many members as they possibly can.

Senator KING. You were trying, then, to build up a powerful retail organization of all individuals or groups who were selling oils at retail?

Mr. SCHUH. That is right.

Senator KING. And in so doing was it your plan to prevent the major oil companies or the producers of oil or the distributors of oil through tanks or through pipe lines from vending oil and products? Did you expect your organization and the organization which you hoped to set up to be the sole distributor all over the United States of oil produced in every part of the United States?

Mr. SCHUH. No. No; we never had such aims. Our principal aim was to have as large an organization as we possibly could have to fight for the retailers' rights.

Senator KING. Against whom?

Mr. SCHUH. Against anyone who encroached upon our rights.

Senator KING. Who are those that would encroach, the public?

Mr. SCHUH. No; major oil companies, jobbers, cut-raters.

Senator KING. You wanted a monopoly—and I don't use the term offensively—you and your organization, and similar ones, the retailers, wanted a complete monopoly of the distribution of oils?

Mr. SCHUH. No; the reason that we wanted other companies out—

Senator KING (interposing). What other companies out?

Mr. SCHUH. The major companies and the jobbers—most of the major companies are out, but the jobbers are not out today, and we have made some effort, but very little effort, to get the jobbers out, because it is an impossible task.

Senator KING. Why did you want the jobbers to refrain from selling the products of oil? Why did you want a monopoly?

Mr. SCHUH. We didn't want a monopoly; we merely wanted fair competition, but when a jobber who buys 2 to 2½ cents cheaper than we do engages in the retail business, very often unfair practices and price-cutting—unfair price-cutting—goes on that injures our members.

Senator KING. Then if a jobber could buy oil 2 or 3 cents a gallon or barrel cheaper than you, you intended to drive him out of business?

Mr. SCHUH. No.

Senator KING. Even though he sold to the public at less price than your organization proposed to charge?

Mr. SCHUH. As a general rule, that type was a secret discount. I can probably illustrate it this way.

Senator KING. Supposing that you got the same price from the manufacturer of oil that the jobber did, did you object to the jobber engaging in the retail business?

Mr. SCHUH. No; not at all. It is only when they took unfair advantage with the excess profit that they had and used that profit to attempt to destroy us that we had any complaint against any of them.

Senator KING. At any rate, your purpose generally has been to bring all of the retailers of all oil products under your organization, or under retail organizations, and then consolidate those retail organizations into one national organization and thus prevent the major oil companies or the jobbers or any intermediaries from selling at retail? Has that been the purpose of your organization?

Mr. SCHUH. No; it was the hope that some day—we never expected and never could—I have yet to see any one of our organizations have more than 33, or let us say 40 percent I think would be high—of the dealers in any given locality as members and our set-up would prevent the unbranded price-cutters from joining us, so that there would always be, no matter what happened, about 18 to 28 or 30 percent of the volume going through another group of dealers, the price-cutters.

Senator KING. A price-cutter is one who sold at less than the price which your organization and the retail organization fixed, is that it?

Mr. SCHUH. We never fixed prices.

Senator KING. Who are the price cutters who sold below you?

Mr. SCHUH. Those who sold below the prevailing price.

Senator KING. Your organization plus the other retail organizations, it was your hope, would fix the retail price of all of the commodities of the oil companies?

Mr. SCHUH. No; we never fixed price and I constantly discouraged price fixing amongst our people.

Senator KING. Well, if some member of your organization sold in one town at a less price than some member of your organization in an adjoining town, then he would come under the condemnation or regulation of your organization, wouldn't he?

Mr. SCHUH. No; in one town the price of gasoline levels itself off so quick that there can be only two prices, one for unbranded merchandise and one for branded merchandise. If there is a difference in price between, we will say, a Mobilgas dealer and a Texaco dealer, pretty soon that levels itself off; either the Texaco dealer comes up or the Mobilgas dealer goes down, or vice versa.

Senator KING. How many members are there of your organization?

Mr. SCHUH. Out of over 400,000 retailers in the entire United States I think we have less than 10,000 active members now.

Senator KING. And the other 390,000 retail dealers, have they organizations?

Mr. SCHUH. No.

Senator KING. They are acting independently? Each one for himself?

Mr. SCHUH. That is right.

Senator KING. And you are trying by persuasion or otherwise to bring them under your organization?

Mr. SCHUH. We have many problems in a large organization.

Senator KING. Are you trying to bring them under your organization or to bring all the retailers under one or more organizations?

Mr. SCHUH. I am not doing anything any more actively.

Senator KING. Well, did you in the past?

Mr. SCHUH. I encouraged all groups to form organizations and to affiliate with us.

Senator KING. You wouldn't call your organization, then, monopolistic or designed to foster monopoly in any way?

Mr. SCHUH. Distinctly antimonopoly in any way.

Senator KING. There might be a difference of opinion.

Mr. Cox. Now, I want to go back to Mr. Girling. You said he was connected with the association at Rockford, Ill.; is that right?

Mr. SCHUH. That is right.

Mr. Cox. Do you recall sometime in 1938 he wrote to you making a complaint about some of the practices of the major oil companies in that area?

Mr. SCHUH. After he had been up to see me.

Mr. Cox. He came and talked to you about it?

Mr. SCHUH. That is right.

Mr. Cox. And then did you write to any of the major oil companies about his complaint?

Mr. SCHUH. I believe I wrote to the Mid-Continent Oil Co.

Mr. Cox. And did they reply?

Mr. SCHUH. Yes; I believe they did.

Mr. Cox. And did you talk to Mr. Girling again after you received a reply from Mid-Continent Petroleum Corporation?

Mr. SCHUH. No.

Mr. Cox. Did Mr. Girling tell you when he talked to you that he had filed a complaint with the United States district attorney in Chicago with respect to practices of major oil companies?

Mr. SCHUH. Yes.

Mr. Cox. Did you discourage him from pursuing that complaint or pressing it?

Mr. SCHUH. No.

Mr. Cox. Can you explain why he afterward withdrew that complaint?

Mr. SCHUH. I don't believe that he withdrew it. I believe that he and Hodges and the group including some of our officers met with the United States district attorney in Chicago and I don't believe the complaint was withdrawn. At least to my knowledge it hasn't been withdrawn.

Mr. Cox. Well, if I suggest to you that the information the Department of Justice has received here in Washington is that the complaint has been withdrawn, would you have any explanation as to why that course might have been taken by Mr. Girling?

Mr. SCHUH. No; because I talked to Hodges about that within the last month and asked him whether he had ever heard anything of the complaint that they had made, and he said no.

Mr. Cox. You are quite clear that after you got letters from the Mid-Continent Petroleum Corporation you didn't encourage or persuade Mr. Girling to withdraw that complaint?

Mr. SCHUH. Not at all.

Mr. Cox. Who is Mr. E. C. Shanks?

Mr. SCHUH. Formerly executive vice president of our organization.

Mr. Cox. Was he the executive vice president in February 1937?

Mr. SCHUH. Yes.

Mr. Cox. I am going to hand you what purports to be a copy of a memorandum which was discovered in your files apparently addressed to you by Mr. Shanks. I am going to ask you whether you remember having received it?

Mr. SCHUH. Yes; I remember distinctly the memorandum.

Mr. Cox. This is a memorandum headed "Truck discounts," addressed to you at the Hotel Raleigh, Washington, D. C., dated February 17, 1937, apparently written by E. C. Shanks, and reads as follows (reading from "Exhibit No. 1302"):

Brewer has sent us information that official Sinclair signs are appearing around Chicago in the form of an upper and lower bar tangent to a circle. On the upper bar it is stated "Just ahead on right," or "Just ahead on left." In the circle are the initials "H. C." On the lower bar is "We cater to trucks." On the back of the sign is a statement, "Anyone found molesting this sign will be prosecuted to the fullest extent of the law." Joseph D. Ahern Company.

While the sign does not say so, the intent is obvious and the inference is that a discount was available to trucks.

Now stopping at that point, Mr. Schuh, would it be correct to assume that from that part of the memorandum the situation which was being discussed was one which the Sinclair Co. granted a discount of some kind to people who took delivery in trucks? Is that correct?

Mr. SCHUH. No; the intention of the sign is a typical sign used by service stations to advertise without saying so that they are giving secret rebates.

Mr. Cox. To whom?

Mr. SCHUH. To truck owners. Similar signs, "We cater to trucks," "Truck stops," and so on, are very often used as well as three little red lights up above their sign meaning 3 cents off and two lights means 2 cents off, and so on, to truck drivers.

Mr. Cox. A kind of code?

Mr. SCHUH. It is a code amongst them and very often it is in violation of State laws that provide you shall post the price at which you sell, and sell at that posted price.

Mr. Cox. I see. Now, I will start reading again the memorandum (reading further from "Exhibit No. 1302"):

This is just one more offense on the part of Sinclair, and it is suggested that you take this up with Arnott and with Carnes, calling Carnes on long distance from Washington. It might even be advisable for you to go to New York and discuss this entire situation, and with reference to the building activities of Sinclair. This company is going to have the dealers slow down on us and it is certain the company is going to suffer severely if you don't correct some of the bad practices which they are instituting today.

Certainly Sinclair is offsetting all the good work which is being done by the N. A. P. R. and by such leaders as Arnott.

Now, who was Mr. Carnes?

Mr. SCHUH. Mr. Carnes is vice president of the Sinclair Refining Co.

Mr. Cox. Now, why would Mr. Shanks suggest to you that you talk to Mr. Arnott, who is connected with Socony Vacuum, about a practice which was being indulged in by the Sinclair Co.?

Mr. SCHUH. During the N. R. A. code this type of practice was specifically outlawed and, thank God, the industry adhered to those rules and policies up until the latter part of 1936. Then the tendency was toward a break-down. If you will consult the Federal Trade Commission records on the day that that letter was sent to me air mail, special delivery, Mr. Arnott and Mr. Hadlick and myself were appearing before the Federal Trade Commission about getting another code, and the object of his calling that to my attention was to point to Arnott that here was another bad practice that was creeping in and as a reason for selling the code to the Federal Trade Commission.

Mr. Cox. Now, was Mr. Arnott in those negotiations with respect to this code representing all the major companies?

Mr. SCHUH. I wouldn't say he was representing. I would say he was the refiners' representative. I don't know that he went to them and got authority, but he took the part of the refiner in the negotiations. He was not—I did not talk to him in connection with this, as far as the Socony Vacuum Co., but as an industry leader.

Mr. Cox. Well, did you complain to him about it so far as the practice was being indulged in by the Sinclair Co.?

Mr. SCHUH. No; I believe I met him at the Washington Hotel and walked over to the Federal Trade Commission and I just called his attention to one more practice creeping into the industry as a result of having no code or no rules of the game.

Mr. Cox. Of course, Mr. Arnott wasn't in a position, was he, to do anything about the practices of the Sinclair Co.?

Mr. SCHUH. Nothing at all, except to know that the things were breaking down.

Mr. Cox. Is this letter merely for the purpose of calling attention to the existence of this practice? Wasn't it a suggestion that something be done about it?

Mr. SCHUH. With the Sinclair Co., and that is what was done.

Mr. Cox. Then why did you say anything about it to Mr. Arnott if it was to be done by the Sinclair Co. only?

Mr. SCHUH. Because of Arnott's position and my position in relation to this code. I believe that at the Federal Trade Commission meeting—and their complete record some place will show—I pointed out this very fact. I remember the date distinctly, February 17, 1937.

Senator KING. May I ask a question or two without conveying my own views definitely? Was it not your purpose, the purpose of your organization, to prevent the major companies or the jobbers, or even individuals, from granting benefits or lower prices to purchasers who were purchasing large quantities in contradistinction to purchasers of very small quantities of oil products? Were you trying to establish, in other words, a uniform price for everybody in all parts of the United States who was buying or distributing oil?

Mr. SCHUH. Senator, that is very inclusive, and I can't give you a yes-or-no answer to that. Most of the State laws, and they are passing them every year, recognize no distinction between anyone driving into a service station buying gasoline. If you want quantity prices, you must put in your own pump and tank, but you may drive into my service station, as one of my customers, and being a driver of an automobile that covers a lot of mileage, you may buy more than half the trucks that come into my station, and it is obviously unfair for me to charge you full price and to give a truck a discount because he has a box on the back of his wagon. And it has been recognized in the industry and in every law that has been passed that discrimination between buyers, unless it is based on a sufficient quantity—and the largest tank attached to the carburetor of a truck is some 25 gallons—there isn't enough difference there to warrant the distinction in price.

Senator KING. You mentioned the code several times. Was it your purpose to perpetuate the N. R. A.?

Mr. SCHUH. The good practices.

Senator KING. And you were to determine, of course, what the good practices were. You remember, do you not, that there was a volume of opposition all over the United States, from every industry—that is, the consumers—because of the practices under the code? And you have referred to it several times with approval, and it seems to me from your testimony you were seeking to perpetuate the practices under the code and to obtain either National or State legislation that would enable you to carry out the same policies that were carried out under the N. R. A.

Mr. SCHUH. Frankly, I have given everything that I have had to get a fair trade-practice set of rules from the Federal Trade Commission, because I felt that it was so necessary for our small people who have no other way of bringing before these bigger companies their problems. We had a code for the petroleum industry and for the people generally; it was the finest thing in the world, and the little opposition that we had to the Petroleum Code came from the dirty, lousy chisellers who were gypping the public in many ways.

Senator KING. That expression is frequently used, is it not, by persons in business because somebody undersells them and still makes a legitimate profit?

Mr. SCHUH. We don't object to anybody underselling us as long as they are fair about it.

Senator KING. Have you not attempted to force individuals who didn't want to join your organization into your organization?

Mr. SCHUH. Never.

Senator KING. Have you practiced any espionage upon the small individual gasoline seller in order to bring him into your organization?

Mr. SCHUH. No.

Senator KING. You have visited him frequently, have you not, and pointed out what you conceive to be the advantages of having the same price and joining all one organization?

Mr. SCHUH. I have called on very few individual dealers. My general duty is to speak before a group of dealers. I am called in to speak before a group of dealers in open meeting, and generally I have a prepared talk that I give them, word for word. Unfortunately, I didn't have such a prepared talk in Kansas City.

Senator KING. And your organization has spent a good deal of time and no little money in trying to secure legislation in various States, have you not?

Mr. SCHUH. Our national organization has never spent a penny to my knowledge to secure legislation.

Senator KING. You have spoken several times here about legislation obtained in the States. Who were the promoters of that legislation?

Mr. SCHUH. Either local or State associations.

Mr. Cox. I would like to offer that memorandum.

The CHAIRMAN. The memorandum may be received. Have you finished questioning on it?

(The memorandum referred to was marked "Exhibit No. 1302" and is included in the appendix on p. 9843.)

Mr. Cox. I think so, on that.

The CHAIRMAN. Mr. Schuh, may I call your attention to the last sentence in this memorandum (reading from "Exhibit No. 1302"):

Certainly, Sinclair is offsetting all of the good work which is being done by the N. A. P. R. and by such leaders as Arnott.

What did Mr. Shanks mean by that statement?

Mr. SCHUH. The work that we were doing, trying to hold the industry to fair trade practices.

The CHAIRMAN. And were you doing that work, were the N. A. P. R. doing that work with Mr. Arnott?

Mr. SCHUH. Mr. Arnott and Mr. Hadlick and myself are members of that committee of three. Mr. Hadlick is secretary of the National Oil Marketers Association,¹ and the three of us are on that committee and we have endeavored to get a code since July 1936.

The CHAIRMAN. Am I to infer from this statement that the N. A. P. R.—this doesn't even mention Mr. Hadlick, this refers to the N. A. P. R.—and such leaders as Mr. Arnott were actively engaged in doing certain good work, as he called it?

Mr. SCHUH. The three of us were.

The CHAIRMAN. This doesn't refer to any three, it refers to two, so I am just questioning you about the sentence that is in this memorandum which you have identified, and we can deal with that directly, Mr. Schuh. The sentence is, "Certainly, Sinclair is offsetting

¹ Mr. Paul Hadlick, whose testimony before this committee appears in Hearings, Part 16.

all of the good work which is being done by the N. A. P. R. and by such leaders as Arnott." I am just asking you what was the good work that the N. A. P. R. and such leaders as Arnott were doing.

Mr. SCHUH. I think first that Shanks was bragging just a little bit, I think that, and the good work that we were doing was in attempting to encourage the industry to stand fast on good, sound, fair business practices.

The CHAIRMAN. Against these discounts that you are talking about, that is one thing.

Mr. SCHUH. Against secret rebates as one thing; against loaning equipment as another. They dropped away from open-price posting to secret rebates not only in our business, but the refiners, the jobbers and so on, and from time to time Arnott, myself, and other people issued public statements urging the industry to hold fast, to hold on here until we could get something in the nature of a code so that when they did come up, they could be brought before the Federal Trade Commission.

The CHAIRMAN. Then the N. A. P. R. and Mr. Arnott were co-operating at the time this memorandum was written?

Mr. SCHUH. Very much so.

The CHAIRMAN. Did you follow the suggestion given to you by Mr. Shanks in this memorandum?

Mr. SCHUH. In talking to Jack Carnes?

The CHAIRMAN (reading):

It might even be advisable for you to go to New York and discuss the entire situation with reference to the building activities of Sinclair.

Mr. SCHUH. I did go to New York and I did talk to Mr. Carnes about it.

The CHAIRMAN. Did you talk to Mr. Arnott?

Mr. SCHUH. Not in New York.

The CHAIRMAN. Did you some place else?

Mr. SCHUH. The only conversation I had with Mr. Arnott was from the Washington Hotel to the Federal Trade Commission Building and that time I called his attention not only to this, but there were several other things on my mind at that time, for instance, jobbers coming to some of the customers of our dealers and the complaints we had received, verbal complaints, offering to put in a tank if this fellow would buy his gasoline from them when he had been buying from a service station.

The CHAIRMAN. So you were in touch with him by telephone?

Mr. SCHUH. No, personally; I walked and talked with him at this time.

The CHAIRMAN. This memorandum, let me call to your attention, is dated February 17, 1937. "Exhibit No. 1301," which was a letter addressed to you by Mr. Arnott, on his stationery, 26 Broadway, bears the date November 16, 1936. Is it the correct inference that throughout this period from November 1936, at least to February 1937, you were in conference at one time or another, and in communication with one another?

Mr. SCHUH. Well, we are today.

The CHAIRMAN. You are still carrying on—

Mr. SCHUH (interposing). We are still friends.

The CHAIRMAN. Oh, well—there is cooperation for the improvement of the industry?

Mr. SCHUH. Not since the 14th of September when I retired as president. Up until that time, yes.

The CHAIRMAN. You are now chairman of the board?

Mr. SCHUH. That is right.

The CHAIRMAN. And your activities have ceased?

Mr. SCHUH. All I do is preside at a meeting twice a year.

The CHAIRMAN. Now I noticed this sentence in the letter of November 16, 1936, written to you by Mr. Arnott. After characterizing the pamphlet issued by the Master Gasoline Operators Association as "unfortunate," he said (reading from "Exhibit No. 1301"):

I am wondering why this particular publication cannot be more constructive

Did you interpret that to be a suggestion that future issues of the publication should be more constructive?

Mr. SCHUH. I would interpret that as his wish.

The CHAIRMAN. What happened? You testified in response to an inquiry made by Senator King that it was sort of tamed down thereafter.

Mr. SCHUH. No, there was a change in management in the association. Now whether it was a month later or 6 months later, I don't know.

The CHAIRMAN. Do I understand you directly to say that the Master Gasoline Operators Association, Inc., which published this pamphlet entitled "The Pump Handle" was afterward absorbed by your organization?

Mr. SCHUH. They were members then, but prior to this, a couple of months, there was a more or less radical group who were formerly—they joined the union, although they had no business to; they joined the union and had a deal with the union.

The CHAIRMAN. What is a radical group? What do you mean by a radical group?

Mr. SCHUH. A group such as the original Master Gasoline Operators, who were just in hot water all the time, not giving serious consideration to what they did before they did it. I can't accuse them of it, I wouldn't accuse them of it, but at one time there was a series of pumps smashed and broken and things like that. Somebody wouldn't post the same price. We never would tolerate that and didn't want it in our organization and constantly urged and advised dealer groups not to pursue any such tactics.

The CHAIRMAN. Now the editor of this pamphlet, his name was given as Gust C. Linsenmann. Do you know him?

Mr. SCHUH. He was the president of the Master Gasoline Operators Association. They changed their name a couple of months after that to the Cleveland Association of Petroleum Retailers, when the amalgamation took place and the ill feeling between the two groups died down.

The CHAIRMAN. Is he still associated with N. A. P. R.?

Mr. SCHUH. He is no longer a director. He was at one time. Whether he is a member of the Cleveland group I couldn't say. I believe so.

The CHAIRMAN. Does this publication still appear?

Mr. SCHUH. I haven't seen it lately but I think it does from time to time.

The CHAIRMAN. The first article in the first issue attached to the letter by Mr. Arnott contains an article entitled "Iowa Plan Ex-

posed." Your original statement this morning said: "As I have already stated, we fought the major oil companies to get the Iowa plan." Do I interpret your statement this morning correctly when I take it to mean that you wanted the Iowa plan?

Mr. SCHUH. Definitely so.

The CHAIRMAN. And Mr. Linsenmann opposed the plan?

Mr. SCHUH. That is right.

The CHAIRMAN. And what was the attitude of the N. A. P. R.?

Mr. SCHUH. We wanted the plan.

The CHAIRMAN. The N. A. P. R. as a whole supported the Iowa plan?

Mr. SCHUH. That is right, and you are bound to have some differences of opinion and those people who haven't fared so well—they may say because of it or not, some of them are howling to high heaven and want it retracted, but we have always taken the position that no major oil company has the right to dictate the amount of money that we can make, and that is what they did prior to the dealer marketing plan or the Iowa plan.

The CHAIRMAN. Apparently from that letter Mr. Arnott had the same view as you. He wanted the Iowa plan and he objected to the criticism of the Iowa plan contained in this pamphlet.

Mr. SCHUH. I couldn't agree with you, because Mr. Arnott and I have tangled on various occasions because of just what I have talked about, and that is the margins that we were allowed.

The CHAIRMAN. That is aside from the issue. This letter complained about the unfortunate articles in this pamphlet. Now, the first article was, "Iowa Plan Exposed." Now evidently Mr. Arnott didn't like that exposition, whether it was right or wrong I don't pretend to say, you understand.

Mr. SCHUH. I would like to say this, as I remember the article and I think I do. After we fought the major companies and got it, this fellow came out and blamed the major companies for pushing it down our throats.

The CHAIRMAN. That is right, and Mr. Arnott was complaining about that sort of publicity and he asked you if you didn't think that this publicity could be more constructive, and apparently thereafter the publicity did become more constructive, or at least that sort of publicity was abandoned, is that correct?

Mr. SCHUH. No; after that there were several tirades.

The CHAIRMAN. But then it was absorbed and amalgamated and the publicity was tamed down, to use your language here.

Mr. SCHUH. It was quite a while after that. There were several tirades after that, against particularly the Standard Oil Co. of Ohio.

The CHAIRMAN. But after the amalgamation of this Master Gasoline Operators Association which was publishing this pamphlet, with your organization, there were no more attacks upon the Iowa plan.

Mr. SCHUH. Oh, yes; when this was published they were part of our group and had sat through meetings, which were more or less a jubilation because we had succeeded in getting the Iowa plan and this fellow sat through that meeting and heard us say how hard it was to get it and what a fight it was, and in spite of that he wrote this article and I think it was Arnott's natural reaction, "You fellows

hollered for this, now here is a group of yours kicking about it. What is the matter?" I think that is his reaction.

The CHAIRMAN. After amalgamation this publication ceased?

Mr. SCHUH. No; we were amalgamated at that time and after that, for, I would say a year—but the records would show it, up to a year at least, as long as Linsenmann was in, and I had nothing to do with getting him out or anybody I know about, I think he just retired. As long as he was in he continued to let loose these tirades and I paid no attention to it. I thought he would learn as time went on what it was all about.

The CHAIRMAN. And he did?

Mr. SCHUH. I don't know. He left his active participation in the organization.

The CHAIRMAN. This memorandum has been admitted to the record.

Mr. Cox. Mr. Schuh, I want to refer to another sentence in the letter of September 26, 1939, by Mr. Hodges; the third paragraph in that letter reads:

"We have already sold approximately twenty-five thousand manuals to oil companies in the Middle West."

That, I take it from your previous testimony, is a substantially accurate statement, is it not?

Mr. SCHUH. I couldn't say yes or no until I saw the statement. I would say that it is over 20,000. I would say it was over 20,000. I wouldn't know exactly.

Mr. Cox. Then we can conclude, can we, that upwards of 20,000 copies of the manuals were sold to major oil companies. Is that correct?

Mr. SCHUH. We have had 34,000 printed. There were 34,000 manuals printed, 22,000 the first time and 12,000 the second time, and I would say that upwards of 20,000 had been sold. What balance they still have there I don't know.

Mr. Cox. Upwards of 20,000 have been sold to the major oil companies?

Mr. SCHUH. That is right.

Mr. Cox. I will offer this letter for the record.

The CHAIRMAN. It may be admitted.

(The letter referred to was marked "Exhibit No. 1303," and is included in the appendix on p. 9844.)

Mr. Cox. When was this luncheon that you said you had with Mr. Arnott?

Mr. SCHUH. October 1935.

Mr. Cox. Your organization had some kind of a committee meeting in Chicago in the summer or early fall of 1936, did you not?

Mr. SCHUH. With whom?

Mr. Cox. Your organization had a committee meeting of some kind in Chicago in the late summer or early fall of 1936, did it not?

Mr. SCHUH. I wasn't in that part of the country until after August 1 of 1936, and it is very probable that we had some committee meetings. Whether I was present or not I don't know.

Mr. Cox. We have from your files what purports to be a carbon copy of a letter written by E. C. Shanks to you, dated at the top "Tuesday, 6-10-36." and the sixth paragraph on the first page of

this letter which I shall show you in a moment reads as follows (reading from "Exhibit No. 1304"):

I had a nice visit with Arnott Monday afternoon after you left in which we discussed a number of phases of the current situation and in which I gave him information he desired relative to the Kentucky jobbers' group and the Master Association of Cleveland. Arnott was much interested in the proposed board meeting here and asked many questions relative to the number of eastern directors we had and similar subjects. He stated that if we wanted to bring six or seven of our eastern directors to Chicago at the time of the standing committee there, he would be able to see that their transportation was paid and he wanted all of our directors who were at the meeting to be his guests at a luncheon to which he would also invite a number of refiners. In thinking this matter over after leaving Mr. Arnott, it was not clear to me whether he meant he would pay transportation by any means or whether he meant that he would pay transportation under an arrangement similar to that by which we propose to bring our western directors to the eastern meeting; that is, four or five in an automobile. Brown is of the opinion that he meant by any method of transportation and that all we would need to do would be to present our bill and Brown asked me also if he might be included in the luncheon.

I ask if you remember receiving that letter.

Mr. SCHUH. I do not. It is entirely new to me.

Mr. Cox. It is addressed to you, Mr. Schuh.

Mr. SCHUH. I don't remember ever having seen it.

Mr. Cox. Could you explain how a letter addressed to you might get in your files when you had never seen it?

Mr. SCHUH. This letter is marked "Memo, 6-10-36." I was not in Milwaukee at that time. Where I was I would have to determine, but I did not get the letter, and if it was mailed to me it was misdirected and never reached me. I never saw that letter nor had I heard anything of the contents of that letter.

The CHAIRMAN. How do you know you were not in Milwaukee at that time?

Mr. SCHUH. At that time I was out talking to dealer meetings.

The CHAIRMAN. How do you fix that in your mind?

Mr. SCHUH. From April until July 31 of that year I did practically nothing but talk to a meeting every night. If I got to Milwaukee it was on a Saturday or Sunday sometimes, and I left again Monday.

Mr. Cox. Of course, this letter was addressed to the La Salle Hotel, Chicago, Ill., so that not being in Milwaukee wouldn't have made any difference. Were you in Chicago about that time, do you recall?

Mr. SCHUH. Well, I can't say definitely whether I was there but I don't believe I was in Milwaukee on that date.

Mr. Cox. Do you have any substantial doubt that this is an authentic copy of a letter which was written by Mr. Shanks to you, regardless of whether you saw it or not?

Mr. SCHUH. I think that is unfair to ask me.

Mr. Cox. Perhaps Mrs. Loos can help us again.

I hand you the letter we have just been discussing and ask you if that is a carbon copy of a document which is in the files of your organization.

Mrs. Loos. Yes; it looks like it.

Mr. Cox. Do you recall ever having seen this letter?

Mrs. Loos. No.

Mr. Cox. Do you have any doubt that it does come from your files?

Mrs. Loos. No.

Mr. Cox. You don't recall whether you received this letter?

Mrs. Loos. I wasn't employed at that time.

Mr. Cox. Where is the letter from?

Mrs. Loos. It is from the office of the association in Milwaukee; this letter wouldn't have come from there, anyway, unless it was forwarded.

Mr. Cox. All right.

Mr. Schuh, what was this meeting that was talked about in the letter; do you know?

Mr. SCHUH. I don't. He mentions the standing committee, and the standing committee was a group of jobbers, refiners, and dealers who were the top of the selected group to complete the code and to work for its adoption, and from that committee the three of us, as I named before, were selected as representatives of the standing committee.

Mr. Cox. Is this the first time you ever heard of Mr. Arnott's offer to pay the expenses of certain of your directors to this meeting?

Mr. SCHUH. That's right.

Mr. Cox. Do you know whether or not that offer was acted upon?

Mr. SCHUH. I don't remember a meeting of the standing committee at that time. As a matter of fact, we haven't met since February 27, 1936.

Mr. Cox. Was there any kind of meeting——

The CHAIRMAN (interposing). That was not the question.

Mr. Cox. Were you at any meeting in Chicago after the date of this letter in 1936?

Mr. SCHUH. I probably have been to hundreds of meetings in Chicago.

Mr. Cox. Did you meet Mr. Arnott there at any time after the date of this letter in the year 1936?

Mr. SCHUH. I think I did.

Mr. Cox. And were there any of your directors present at the time you met Mr. Arnott?

Mr. SCHUH. Not that I recall.

The CHAIRMAN. Do you know of any occasion upon which the expenses of any members of the board of directors were paid by Mr. Arnott, or by any of the major companies, to any such meeting?

Mr. SCHUH. Never did I know of it, and I would have raised hell if it had been done.

The CHAIRMAN. And will you say that expenses have never been paid for any of your officers or directors, so far as you know, to any such meeting?

Mr. SCHUH. So far as I know, never.

Mr. Cox. Are you suggesting now that you would have rejected such an offer if it had been made?

Mr. SCHUH. Absolutely.

Mr. Cox. There is nothing in this letter that suggested that any such offer would have been rejected.

Mr. SCHUH. I would have rejected it, because so far as being president of the group, I would never have tolerated that.

Mr. Cox. Do you think Mr. Shanks might have tolerated it?

Mr. SCHUH. It is very possible that Shanks wanted to get directors from far away to attend this code meeting, and it is very possible that he may have considered it.

Mr. Cox. He did a little more than consider it in this letter. He seems to view the proposal with at least temperate enthusiasm.

Mr. SCHUH. He may have proposed it.

Mr. Cox. You think he may have proposed it?

Mr. SCHUH. He may have proposed it.

Mr. Cox. Was he in the habit of suggesting to Mr. Arnott that Mr. Arnott pay the expenses of the directors to the meeting?

Mr. SCHUH. But from the tenor of the letter it looks like a sales letter to me, and he must have decided against sending it to me. That is why I never got it.

Mr. Cox. I should like to offer this letter.

The CHAIRMAN. The letter may be received.

(The communication referred to was marked "Exhibit No. 1304" and is included in the appendix on p. 9841.)

The CHAIRMAN. I should like to see the letter.

Did you ever write any letter or make any communication whatsoever to Mr. Shanks with respect to the subject matter of this memorandum?

Mr. SCHUH. No, sir. I didn't know the memorandum had been written.

The CHAIRMAN. That might be, and still you might have communicated about the subject. He said, "I am to see Arnott upon this further toward the end of the week, probably Friday, and suggest that you communicate the reaction of those at your meeting to me upon this point." That prompted me to ask the question whether you ever did communicate the reaction of those at your meeting on this point to Mr. Shanks.

Mr. SCHUH. I don't know what meeting he has reference to, and he probably wanted me to take this up at a meeting of some committee, but I never got the memorandum.

The CHAIRMAN. Did you ever talk with anybody about the payment of the expenses of directors to a meeting of the eastern group?

Mr. SCHUH. No; never.

The CHAIRMAN. And you never communicated with Mr. Shanks about such a thing?

Mr. SCHUH. Never. I say that so positively because his chief complaint against me was because I didn't write often enough. I am a poor letter writer.

Mr. Cox. Now, Mr. Schuh, I call your attention to the statement here that Mr. Shanks makes that he gave Mr. Arnott certain information relative to the Kentucky jobbers' groups and the Master Association of Cleveland. Do you have any idea what that information was?

Mr. SCHUH. No; I don't. As I say, this Master Gasoline Operators' Association at that time was not an affiliate of ours. The Independent Oil Dealers were.

Mr. Cox. Is this the same Master Association of Cleveland that was publishing the document which has already been introduced in evidence here?¹

Mr. SCHUH. That's right. The Independent Oil Dealers were dead, or practically dead, and the Master Operators were going, and I

¹ "Exhibit No. 1301"

don't know what information he could have had, unless it is probable that something else developed, as he explained to them.

The CHAIRMAN. The committee will stand in recess until 2:15.

(Whereupon, at 12:15 p. m., a recess was taken until 2:15 p. m. of the same day.)

AFTERNOON SESSION

The hearing was resumed at 2:25 o'clock, upon the expiration of the recess.

The CHAIRMAN. The committee will please come to order. Are you ready to proceed, Mr. Cox?

Mr. Cox. Yes.

Mr. SCHUH. I would like to ask leave of the committee to make a statement that I believe will clarify something that transpired this morning, and will probably save some time.

The CHAIRMAN. Very well.

Mr. SCHUH. That is my association with Mr. Arnott. I would like to point out that I first met Mr. Arnott after having been appointed to the Planning and Coordination Committee by President Roosevelt and he had been appointed to that same committee under the N. R. A., and we met and worked on that committee for a considerable period of time, and at many times we fought across the table, and after the N. R. A. was killed by the sick chicken, the group of oil men—also, that Mr. Arnott had been appointed in charge of stabilization by Mr. Ickes, Secretary of the Interior, and that we worked together.

The CHAIRMAN. What do you mean by stabilization?

Mr. SCHUH. Well, at that time, to paraphrase Mr. Ickes'¹ words, the retail markets were completely demoralized throughout the country, and Arnott was appointed by Mr. Ickes to help to bring order out of that chaos, and at the time that the N. R. A. was declared illegal, this group of independent oil men (no major companies were present at this meeting) met at the Mayflower Hotel, and subsequent to that meeting we went over to see President Roosevelt, and at that time we thanked him for everything that the Government had done for the petroleum industry under the code and told him that we had just issued a statement asking the entire industry to abide by the policies and practices adopted under the code insofar as they were legal, and the President at that time said "That's fine."

So subsequent to the deacease of the code, the N. R. A. Code, we met to formulate a proposed code for submission to the Federal Trade Commission under their regular procedure. That code met with very little acceptance.

The committee that drew that consisted of sixty-five or seventy representatives of all branches of the industry, under the leadership of Mr. Arnott, who was then vice president in charge of marketing for the American Petroleum Institute, and they were primarily representatives of trade organizations and in some companies on that committee. A little over 6 months later a group of independent refiners from the Middle West called a meeting at Chicago to consider the advisability of developing a code, and if it could be agreed upon to develop this code, then to go forward with it.

¹ Hon. Harold Ickes, Secretary of the Interior

The CHAIRMAN. Under what authority?

Mr. SCHUH. To submit to the Federal Trade Commission.

The CHAIRMAN. That is a code of fair-trade practice.

Mr. SCHUH. A code of fair-trade practices. As a result of that meeting in Chicago a code was drafted and it was taken home and submitted to the various groups by the representatives there who included retailers, jobbers, small refiners, and large refiners.

On the 27th of February we met in Chicago once more with our reports on the code as our people, our different groups, felt about it, and at that meeting the standing committee was formed and the standing committee selected Mr. Arnott to represent the refiners, and Mr. Hadlick to represent the jobbers, and myself to represent the retailers.

The CHAIRMAN. That had to do with the study of proposals to go into a code to be submitted to the Federal Trade Commission.

Mr. SCHUH. That is right.

The CHAIRMAN. Did it embrace anything else?

Mr. SCHUH. Nothing else. It was strictly on the code.

The CHAIRMAN. So that the conversations of yourself, Mr. Hadlick, and Mr. Arnott were strictly confined to code consideration.

Mr. SCHUH. That is right.

The CHAIRMAN. Now is that true of your conversations with Mr. Hadlick?

Mr. SCHUH. Yes.

The CHAIRMAN. Is that true of your conversations and communications with Mr. Arnott?

Mr. SCHUH. Yes; I believe that it was.

The CHAIRMAN. Now you express a little doubt about it. I can understand why, having read that letter this morning.

Mr. SCHUH. Senator, I would like to say this, that I want to be absolutely honest. I am under oath; I want to tell the truth.

The CHAIRMAN. The committee appreciates that.

Mr. SCHUH. It is quite difficult to say that I never talked about anything else, because I may have talked and I have talked about football games and other things, but there never was anything illegal.

The CHAIRMAN. Of course, we are not interested in your opinion or predictions, even on football games.

Mr. SCHUH. I mean there was never anything illegal or had a tendency to be illegal.

The CHAIRMAN. Now let me set your mind at rest, Mr. Schuh. What this committee is concerned about, if I understand the minds of the committee members, is the economic problem. Obviously there is a problem here because everybody is talking about it, everybody in every branch of this industry and in almost every other. We are concerned to know what sort of a recommendation, if any, we should make to Congress and to the President with respect to the solution of these very difficult problems.

Now the preparation of a code is one thing, and any plans that the leaders of industry may have with respect to regulating privately the action of retailers or refiners, or those who lay pipe lines, is quite another thing.

The adoption of a code of fair practice under the authority of law through the Federal Trade Commission is one thing; the adoption of

a private understanding is quite another, and whether or not there is such an understanding, or was an attempt to make such an understanding, is a matter of interest to this committee in determining what its recommendation shall be. Do I make myself clear to you?

Mr. SCHUH. Yes, yes; very clear.

The CHAIRMAN. This is not a grand jury investigation; we are not trying to find out whether you ever violated the antitrust law or anything of that kind, but we are interested in knowing what the organized members of this industry have done and what they want to do.

Mr. SCHUH. Senator, I understand perfectly and the reason I wanted to make the statement in clarification is because the code to me, the N. R. A., is dead and then the next code that came up was the one of the Federal Trade Commission and the only code.

The CHAIRMAN. Now then, let me ask you this question, reading again "Exhibit No. 1301," the letter of Mr. Arnott, November 16, 1936, addressed to you.

The attached is rather unfortunate.

The attached being two issues of the Pump Handle, one of which contains the article "Iowa Plan Exposed." Then going on:

I am wondering why this particular publication cannot be more constructive. Frequently it is violent in its accusations against almost everyone in the industry.

Did that letter have anything to do with the code or the formulation of a code?

Mr. SCHUH. I would say no.

The CHAIRMAN. Then how about the memorandum which was presented from your files this morning, a memorandum prepared—the one of February 17 from Mr. Shanks?¹

Mr. SCHUH. I am familiar with the one you mean. That did have something to do with the code because the practices complained of in this particular thing were things that we had in the rules and the code that was proposed to the Federal Trade Commission.

The CHAIRMAN. Do you have that exhibit here? It might be well to send for it in order that we may have it definitely before the witness. That memorandum—you have it clearly in mind, I think—seemed to me to go a little bit beyond any consideration of a code. It referred to a particular sign which the Sinclair Co. had out and it suggested that you confer with an officer of the Sinclair Co., not about any code, but about this particular practice, and then it also suggested that you talk with Mr. Arnott, not only about this practice of the Sinclair Co. of erecting signs to indicate to truck dealers that they might get a concession on gasoline for trucks at the Sinclair stations, but also with what appeared to be the Sinclair program with respect to the construction of stations. Do you recall?

Mr. SCHUH. Yes, sir.

The CHAIRMAN. What had that to do with the code? Wasn't that dealing clearly with a day-to-day practice that you were going to alter, that you and Mr. Arnott, in your conversations with Mr. Carnes, were going to try to alter?

Mr. SCHUH. I would say so. Mr. Arnott at that time was vice president in charge of marketing of the American Petroleum Insti-

¹ "Exhibit" No. 1302," appendix, p. 9843.

tute and on numerous occasions when difficulties developed that more than one company was responsible for—

The CHAIRMAN (interposing). Do you mean he was vice president in charge of marketing of the A. P. I. at the time this letter of November 16, 1936,¹ was written?

Mr. SCHUH. Yes, sir; and we have called to the Institute's attention practices that we have felt were bad when indulged in by more than one company—unfair trade practices that we thought were bad, that in our own opinion just didn't make sense and we felt that the Institute ought to communicate to its own members bad trade practices and just point them out to them that complaints are coming in about them. Mr. Arnott was vice president at that time and he was acting in this capacity when he originally started to work on a code for submission to the Federal Trade Commission.

The CHAIRMAN. Now you are on the stand here today as the result of a subpoena because the testimony was given here last week that certain efforts were being made to enforce a particular type of program upon dealers in the industry. Now what is your opinion, what is your recommendation to the committee? Should that be done? If it is done, is it a proper practice, or was it never indulged in at all?

Mr. SCHUH. It was never indulged in at all.

The CHAIRMAN. Then what was Mr. Arnott doing when he wrote you this letter? Why was he calling your attention to something that seemed to him to be objectionable, if there was no intention on his part to prevent that sort of activity?

Mr. SCHUH. As I understand it, he was calling it to my attention purely to indicate to me that here was someone who didn't understand the actual situation, and even though he didn't like it, it probably appeared comical to him, that here is a group of dealers that urged us to get out, and now we have gone out and they tell us we jammed it down their throat. And he probably thought that I had the opportunity—I don't know, I am drawing a conclusion here and I probably haven't any right to, but I would say that he thought that if I talked to this fellow and explained what happened and how we had fought the companies to get out, that this man would have a clearer understanding of what had gone on.

The CHAIRMAN. Well, have you finished your statement, the statement you made a request to submit?

Mr. SCHUH. With this exception, that from the standing committee time on, we have called on the Federal Trade Commission very many times and gone over the rules that were submitted to them in the hope that the Federal Trade Commission would give us a Code of Fair Trade Practices under their regular procedure.

Mr. O'CONNELL. Have they approved the code?

Mr. SCHUH. They have not as yet.

Mr. O'CONNELL. What do you understand to be the legal effect of their approval of the code, were they to approve it? I take it you think it important that they act on it.

Mr. SCHUH. They must act on it or we wouldn't have a code.

The CHAIRMAN. May I interrupt. I have "Exhibit No. 1302." To show you, Mr. Schuh, what I have in mind, I am reading now from the exhibit, a memorandum of Mr. Shanks, addressed to you. He describes the Sinclair sign.

¹ "Exhibit No. 1301," appendix, p. 9842.

Then he says:

While the sign does not say so, the intent is obvious and the inference is that a discount was available to trucks. This is just one more offense on the part of Sinclair, and it is suggested that you take this up with Arnott and with Carnes, calling Carnes on long distance from Washington. It might even be advisable for you to go to New York and discuss this entire situation, and with reference to the building activities of Sinclair. This company is going to have the dealers slow down on us and it is certain the company is going to suffer severely if you don't correct some of the bad practices which they are instituting today.

Now, what does that have to do with a code? That seems to me to apply directly to a program which was very clear in the mind of the author of the memorandum and which the author assumed would be clear in your mind, of activity right now to correct what you regarded as offenses, immediately, not by any code to be submitted to the Federal Trade Commission.

Mr. SCHUH. You are right in that the offenses committed were being committed right then and there.

The CHAIRMAN. And you wanted to stop them right then and there.

Mr. SCHUH. And I wanted to stop them right then and there, and subsequently I went to the Sinclair Co.—

The CHAIRMAN (interposing). So that we are dealing with two things. We are dealing, first, with whatever discussions you may have had with Mr. Hadlick and with others with respect to a code to be formulated and submitted to the Federal Trade Commission, and you are also dealing with the day-to-day problems of the industry and the way you approach them and handle them.

Mr. SCHUH. That's right. I think I made it clear this morning that some of these things that were complained of in this memorandum we used—for instance, I used this very statement before the Federal Trade Commission that day as a further indication of the need for a code, that here a company was building and leasing service stations, what we termed “indiscriminately,” and it was further evidence, and I used it in that connection, and I believe that that is the reason it was rushed to me by air mail, because it got to me the same day it was sent, so that I would have that information when I went to the Federal Trade Commission.

Also, we always tried, and we always will try, to stop practices that we think are to the detriment of the retailers.

The CHAIRMAN. What reason did you have to believe that you could persuade the Sinclair Co., or any other company to abandon competitive practices of this kind?—Because that was a competitive practice.

Mr. SCHUH. I would like to term it a destructive practice.

The CHAIRMAN. Very well, you may.

Mr. SCHUH. It might have been competitive but it was also destructive. For instance, if Sinclair had moved into Wisconsin with that they would be urging dealers to violate a law that we had there, and we think it is a bad practice to discriminate between customers, so that we were anxious to stop it, and in very many instances when we could complain bitterly enough and make them understand this sort of thing wasn't right, it wasn't fair, it wasn't the honest thing to do with their dealers, I would like to explain this particular situation of indiscriminate building. They had a dealer in Racine, Wis., had him tied up hand and foot, and built a

station two and a half blocks away from him, paid \$150 a month for that station and leased it to a lessee for \$35 a month, and he was taking business away from their other dealer that didn't cost them a penny, and things like that that we felt we had a right to complain about.

And that particular thing was shown to them. We know that we can't tell Sinclair or anybody else, "You can't build any more stations," but we try to prevail upon them to use good judgment and not build them any old place they find a vacant lot. It reminds me of a statement that Norman Myers made when he was secretary of the Petroleum Administrative Board, that the oil industry ought to give the corners back to the saloons.

Mr. O'CONNELL. How did you propose to deal with the problem that you referred to as the indiscriminate building of stations in the code that you presented to the Federal Trade Commission?

Mr. SCHUH. We couldn't.

Mr. O'CONNELL. Well, I understood you to say that you also presented that particular situation to the Federal Trade Commission.

Mr. SCHUH. The discount in connection with the open price posting section that we had; the open price posting section would have prohibited discounts at service stations.

Mr. O'CONNELL. I am talking about the indiscriminate building of service stations.

Mr. SCHUH. That wasn't brought up, excepting in this way, that the companies by loaning and giving equipment to anyone who wanted to build a station could do it. Up to that extent that was considered, and there was a rule in the code providing the banning of the giving of free equipment.

Mr. O'CONNELL. Yes; but I take it there was no attempt made in the code to deal with the problem you referred to just now as the indiscriminate building of service stations by Sinclair or by any other company. Is that correct?

Mr. SCHUH. Excepting to prevent them from giving equipment which accomplished the same thing.

Mr. O'CONNELL. So that to the extent that Mr. Shank's memorandum referred to meeting a problem created by the indiscriminate building of service stations, you had no hope of treating directly with that problem through the code, but rather through private negotiations or dealing with the Sinclair Co.?

Mr. SCHUH. That is right. That is part of our code—part of our creed.

Mr. O'CONNELL. Part of your what?

Mr. SCHUH. Our creed, which condemns the indiscriminate building of service stations and urges the industry to cease and to use common sense.

Mr. O'CONNELL. I see; but you had no hope of putting that in the code?

Mr. SCHUH. No.

The CHAIRMAN. Just another illustration of trying to hold over-production in line?

Mr. SCHUH. Well, we have a service station now for every oil well, and I think they are building stations about as fast as they are drilling new wells, and we haven't been able to stop it, and I am not optimistic enough to believe that we can ever stop it. A fellow has

a corner; he is going to put a station on it if he can get someone to help him or has the money to do it.

The CHAIRMAN. Mr. Shaughnessy, you wanted to ask a question?

Mr. SHAUGHNESSY. Yes. Mr. Schuh, these practices that your association condemns and that are condemned in the code that was submitted to the Federal Trade Commission are generally admitted as bad by the major marketers when you complain to them, are they not?

Mr. SCHUH. Yes; I would say that they may recognize them as bad practices, but they don't discontinue them.

Mr. SHAUGHNESSY. They don't admit that they do it?

Mr. SCHUH. No; very often they don't.

Mr. SHAUGHNESSY. So there is sort of an unwritten law in this industry in respect to certain things?

Mr. SCHUH. I wouldn't say it was an unwritten law.

Mr. SHAUGHNESSY. But it isn't looked upon with favor. I mean, a sales manager won't admit that his company's dealers are giving secret discounts?

Mr. SCHUH. Oh, no.

Mr. SHAUGHNESSY. He won't admit his company is loaning equipment?

Mr. SCHUH. Oh, no.

Mr. SHAUGHNESSY. He won't admit various types of competitive practices?

Mr. SCHUH. They try to keep it hidden as much as they can, because there are other companies in this industry that have guts enough, when they find one of those situations prevailing, to cut it wide open, and so naturally they try to keep what they are doing secret. Very often they don't do these things directly, but they employ a second-story slugger to do it, and I might define a second-story slugger as a distributor appointed by this company to operate in the same area in which the company distributes, and they are "holier than thou" and keep their hands folded and pray every Sunday, but their distributor just cuts everybody's throat.

The CHAIRMAN. Has that been done to any great extent?

Mr. SCHUH. Very much.

The CHAIRMAN. You have known of that practice to your own personal knowledge?

Mr. SCHUH. Yes.

The CHAIRMAN. Carried on by what company?

Mr. SCHUH. Well, I have to be fair; the only one I do know that doesn't do it is the Sun Co.

The CHAIRMAN. That is quite a general practice, then, in the industry?

Mr. SCHUH. Let me say this: It is done in areas. We don't have it in Milwaukee, for instance. There is none of that done in Milwaukee, there is no dual distribution, but in the intensely competitive metropolitan areas. I don't like the practice, but I understand how it came about; it is that a jobber handling a certain company's product goes out on his own and does something, and another company can't get a jobber like that who will do that, so he gets himself a distributor to be competitive with this jobber, and it doesn't make the practice a good practice. I mean, I understand how it comes about. We have condemned it roundly every time.

The CHAIRMAN. And you are still condemning it.

Mr. SCHUH. I still condemn it. I think it is dirty.

The CHAIRMAN. Does it still exist?

Mr. SCHUH. It still exists, and a code, we felt, would go some way toward eliminating that.

Mr. Cox. I think when the committee rose, Mr. Schuh, that I was asking you about the conversation referred to in "Exhibit No. 1304," specifically about the statement of Mr. Shanks, in which he says that he gave Mr. Arnott certain information with respect to the Master Association of Cleveland, and I either asked or was about to ask you if you knew what that information was.

Mr. SCHUH. I wouldn't have the slightest idea.

Mr. Cox. That was the same association that had been publishing the Pump Handle, was it not?

Mr. SCHUH. That is right. At that time they were not an affiliate of our group; that is, at the time that this supposed memorandum is dated.

Mr. Cox. And you don't know whether that conversation between Mr. Shanks and Mr. Arnott had anything to do with this same complaint that Mr. Arnott made to you?

Mr. SCHUH. I don't know, excepting that I point out that the dates are somewhere near 4 or 5 months apart.

Mr. Cox. That is why it occurred to me it might be connected. You said this publication had been taking that line for some time, did you not?

Mr. SCHUH. I wouldn't know prior to the time they came to work with us. I would only know after that.

Mr. Cox. Have you had any assistance from the major oil companies obtaining members for the association?

Mr. SCHUH. No; we have had major companies oppose, or not exactly oppose but help to prevent, dealers from joining our group.

The VICE CHAIRMAN. Will you develop how they do that?

Mr. Cox. Yes. Perhaps the best way to develop that is to have you explain to the committee how they do oppose that.

Mr. SCHUH. Well, in the particular case of one company that I know of in a certain community, every time that we have attempted to hold a meeting the manager of that company calls his dealers into a meeting the same night so they can't attend our meeting.

Mr. Cox. Tell us what company that is.

Mr. SCHUH. The Standard Oil Co. of Indiana.

Mr. Cox. How long has that been going on?

Mr. SCHUH. I would only know from the report that our man from down there has given us, and ever since its inception, the organization's inception in that community, Aurora, Ill., he has been bucked by the manager of the Standard Oil Co. there.

Mr. Cox. Has that been true of any other towns in Illinois, to your knowledge?

Mr. SCHUH. I can't report to my knowledge, but I know that in numerous instances we have run up against similar trouble.

Mr. Cox. In Illinois?

Mr. SCHUH. I think in various places.

Mr. Cox. Always trouble caused by the Standard Oil Co. of Indiana?

Mr. SCHUH. I wouldn't say it was that company alone. I think we have had some difficulty up in Minnesota with either that com-

pany or other companies, but we probably have more trouble with Standard Oil Co. of Indiana than any other company.

Mr. Cox. That hasn't been the attitude of all the major companies, has it, Mr. Schuh?

Mr. SCHUH. No; the Continental Oil Co. has been very fair and I would like to pay them the tribute; they have been the squarest and the whitest company, that I know of in this business so far as we are concerned. Any time we have had anything to complain about they have gone down through their house to make sure they weren't doing what we were complaining of, providing it was a legitimate complaint, and they haven't hesitated to tell their dealers that they ought to be in an organization, and even have said that they ought to be part of our organization.

Mr. Cox. They sent a circular letter to their division managers in 1936, didn't they, Mr. Schuh, recommending that dealers join your organization?

Mr. SCHUH. I don't know whether they sent a circular letter on that. I know that they sent a circular letter, and as I remember it, in that letter this would be about the quotation, that "We want our friends, the retailers, to have an opportunity to handle a very difficult task, at its best, and we want to put nothing in their way to prevent that." Do you have the letter there?

Mr. Cox. Well, I will hand you a group of documents, the first of which purports to be a carbon copy of a letter written by Mr. Shanks, dated August 20, 1936, to Mr. Harry J. Kennedy, vice president of the Continental Oil Co., Ponca City, Okla.; the second document is a letter from Harry J. Kennedy to Mr. Shanks, dated August 13, 1936, and there is attached to that what purports to be a carbon copy of a memorandum or circular entitled "Encouraging the Right Type of Dealer Organization." I ask you whether that refreshes your recollection as to the action which the Continental Oil Co. took at that time.

Mr. SCHUH. May I comment on these as I come to the documents?

Mr. Cox. Yes; of course.

Mr. SCHUH. The first copy, a letter from the executive offices of the National Association of Petroleum Retailers, dated August 29, 1936, to Mr. Harry J. Kennedy, vice president of the Continental Oil Co., has reference to a general letter that went out to all oil companies calling to their attention various practices that we were complaining of.

I would say that the letter dated August 13 from Harry J. Kennedy to Mr. Shanks was a fair statement of the company's position.

Relative to the memorandum sent to the division officers, district managers, or whatever you call them, by Mr. Kennedy, dated August 13, 1936, I think that is a clear statement of the company's policy, and that they have at least as has been indicated to us pursued that policy, and I think they pursue it today. I would like to point out that Mr. Kennedy at one time had a very different opinion of me; he thought I was somewhat communistic, at least a little bit "red" in some of the things that I had done, and they had watched our organization from the time of its inception until this date before they ever made any comments on what we were doing.

The next one dated August 11 from Mr. Kennedy to Mr. Shanks, I believe that was in response to a letter that was written to Mr.

Kennedy asking if there were any dealers in Denver or that area where we had no organizations at all, and if they could recommend anyone.

Mr. Cox. Now, Mr. Schuh, I call your attention to a statement which appears on page 2 of this memorandum which was attached to Mr. Kennedy's letter, which was apparently a memorandum sent to division managers, the paragraph in question reading as follows [reading from "Exhibit No. 1305"]:

Experience has also shown that when the leadership of Messrs. Schuh and Shanks of N. A. P. R. and the various regional officers and directors of their association has been headed only constructive results have followed. We desire to give these men any assistance we can in encouraging the right kind of organization.

I understood you to testify a moment ago that you regarded that as a fair statement of the Continental Oil Co.'s policy. Is that correct?

Mr. SCHUH. And I regard it as a compliment.

Mr. Cox. I am sure you should, Mr. Schuh. Do you know whether or not any other major oil companies circularized their managers or their dealers in the same way the Continental did?

Mr. SCHUH. Unfortunately they haven't.

Mr. Cox. I should like to offer this letter. I am indifferent to the question of printing but since it has been discussed I think it ought to be admitted.

The CHAIRMAN. The exhibit may be received.

(The letters referred to were marked "Exhibit No. 1305," and are included in the appendix on p. 9846.)

The CHAIRMAN. Were you going to make some remark?

Mr. SCHUH. One other company that has circularized its dealers as a result of our organization is the Standard Oil Co. of Indiana. After a year and a half quarreling with them, they finally put out a letter such as we felt ought to go out to tell their dealers exactly where they stood as relates to price and the right the dealer had to set his own price. I want to be perfectly honest, there is that one other time.

Mr. Cox. When was that done?

Mr. SCHUH. That was done—wasn't there a copy of it in this? I have a copy of it here. I would be perfectly willing to have you have it, because we fought with them for a year and a half and finally got them to tell their dealers where they stood.

Senator KING. By that do you mean that you attempted to influence producers and dealers to accept your views?

Mr. SCHUH. Senator, I didn't understand that.

Senator KING. I understood from your last answer that your point was that you were trying to influence some company to take the proper course with respect to its dealers, that is to the retailers, and the retailers to be amenable to that company.

Mr. SCHUH. No, Senator; just the opposite. We wanted this company to let its dealers alone. They never did, and I don't think ever will endorse this organization.

Senator KING. That is your organization?

Mr. SCHUH. Our organization. I don't think they ever will, because of the blood that has been spilled between us and the Standard Oil Co.

I might explain that some of their people have constantly harassed their dealers to keep their prices down, at the same time the company taking all the profit that it could, and under the Iowa or dealer marketing plan we felt the dealer should be entitled to arrive at his own price without dictation from any company. If the company wants to dictate the price, then they ought to take the station back and take the burden with it, but they shouldn't lease the station out and still have complete control of it.

Senator KING. Would this be a fair statement, if you will pardon me, Mr. Cox, that the benefit which you and your associates and others derived in having fixed prices under the N. R. A., and having more or less of a monopoly, has exercised its influence upon your proceedings since, and the proceedings of others, so that they would like a sort of regimentation of business such they had under the N. R. A., and that your efforts have been in order to secure regimentation, or at any rate to secure such organizations as would influence prices and determine what prices should be charged?

Mr. SCHUH. No; that would not be a correct statement. In the first place, under the N. R. A. we never had fixed prices at either wholesale or retail in the gasoline business. We have never had fixed prices, and we fought the proposal that the Federal Government made wherein they were going to establish fixed prices. We do not believe in fixed prices.

Senator KING. You believe, do you not, in getting as many retailers in your organization as possible, and then to determine the policies which will be pursued by that organization, the policies respecting the acquisition and the sale of your commodities?

Mr. SCHUH. No, no; we are only interested in the retail dealer obtaining a cost-recovery price. I am clearly on record many times, and I have had loads of "dead cats" thrown at me because of it, that we have got to keep our prices down, that the tendency was too often to take too high a price. I am opposed to price fixing, and I am 100 percent in favor of fair competition, and I represent in saying that the consensus of opinion of the organization.

Mr. Cox. Since you brought up the matter of the Standard of Indiana, Mr. Schuh, I would like to ask you some questions about that. Was your objection to their marketing policy grounded on the fact that they had been encouraging their dealers to lower prices?

Mr. SCHUH. Our objection to it was the interference with the dealers in establishing prices.

Mr. Cox. What form had their interference in fact taken? Had they been encouraging them to lower prices or to raise them?

Mr. SCHUH. Generally to lower prices below the levels of other branded dealers in that area.

Mr. Cox. But although that had been their policy in fact, as I understand your answer a moment ago, your objection was not based on the fact that their influence had been exerted in the direction of lowered prices, but merely on the ground of principle; is that correct?

Mr. SCHUH. The way that we feel about it is that we see eye to eye that the prices must be reasonable, and we are opposed to, in many instances, the same things they are opposed to, and we frankly told them so, that we were opposed to high prices in areas where they were too high, but regardless of that, even though we saw eye to eye with them on that, they had no business dictating price.

Mr. Cox. Did you object to them about any specific instance where they had used their influence to raise prices rather than lower them?

Mr. SCHUH. I don't know that they have ever used their influence to raise the price.

Mr. Cox. So their influence had always been exerted in the other direction?

Mr. SCHUH. Yes; but I want to restate that it wasn't because they were lowering the prices, it was because they were dictating prices to their dealers. That was one part of it, and the other part was that many of their dealers felt that they were hammering merchandise down their throats in a way that just wasn't fair.

If you don't object I will explain that we went to them, we talked with them, we pleaded with them, we did everything but cry on their shoulders and got no place, and as a result the board of directors in meeting last April decided to prosecute a campaign against the Standard Oil Co., and so publicly announced.

Mr. Cox. Was that the press release of April 8, 1939?

Mr. SCHUH. That's it.

Mr. Cox. There is a sentence in here that rather interests me, which I want to read to you and then I will let you look at it. This is the second paragraph, and reads as follows: "Definite steps were taken by the directors to prosecute a campaign against the Standard Oil Co. of Indiana for the clumsy manner in which it attempts to control retail price." I will let you look at that. That suggests to me that what you are objecting to is not the control of price, but the way in which they were doing it.

Mr. SCHUH. I think that states just what I said, that we didn't disagree with them, when the prices got too high it was wrong. We didn't disagree; we did disagree with the clumsy manner that they did it in. If they could walk into a dealer and sell him legitimately good business principles, such as we have preached, we haven't any objection to that. That is all right. But when they come into a dealer and say, "Well now, your lease is coming up for renewal next month, and we are kind of worried about the volume through this station; don't you think you ought to get your price down?" What was the poor dealer going to do? He was either going to put his price down or else he was going to lose his lease, at least he felt, and that is what was meant by that statement. I think it bears out what I said before, that it wasn't where they were putting the price, but it was the way they were doing it.

Senator KING. Were you dealing with the Standard Oil?

Mr. SCHUH. The Standard Oil Co.

Senator KING. Were you buying oil from it?

Mr. SCHUH. No.

Senator KING. What business was it of yours to butt into the matter—I don't use this by way of criticism—when you were not one of their clients?

Mr. SCHUH. We have hundreds of Standard Oil dealers in our association and we were their representatives, selected by them.

Senator KING. Did you think that your knowledge of the economics and the problems and the factors involved in the fixing of prices was superior to that of dealers in various parts of the United States and the company itself, so that you ought to determine what the prices should be in Arkansas or some other State, rather than the one in which you lived?

Mr. SCHUH. We have never made any effort to determine what the prices ought to be. The only thing that we could do is to point out broad economic principles and warn dealers that you can't violate the laws of economics.

Dr. LUBIN. Mr. Schuh—

Senator KING (interposing). One question. Did you think you understood the law of economics better than other patrons of the oil companies?

Mr. SCHUH. Not better than—I wouldn't say—than others. I think I understood them just as well, and at times I was tempted to believe that I understood the law of economics better than some of the people in the Standard Oil Co.

Dr. LUBIN. Mr. Schuh, a minute ago, in replying to a question that was asked you, you said you objected to the clumsy methods of one of the oil companies, and you recommended your own methods of doing business. There was put into the record last week "Exhibit No. 1266,"¹ which purports to be a circular letter received by the Petroleum Retailers Association, signed "National Association of Petroleum Retailers, Ways and Means Committee, Fred L. Brewer, chairman; W. M. Boutin, and M. E. Holland." Do you know of that document?

Mr. SCHUH. I did not prepare it. It was prepared in the office.

Dr. LUBIN. It is an official document of your organization?

Mr. SCHUH. I understand it was prepared and submitted to our counsel, a lawyer that we had employed, and that it was passed by the Ways and Means Committee.

Dr. LUBIN. So it represents the business policies that your organization attempts to put into practice?

Mr. SCHUH. Well, I don't believe that I can say "yes" to that.

Mr. LUBIN. Will you say it does not represent the recommendations of your Ways and Means Committee?

Mr. SCHUH. Well, I would like to say about all of the bulletins that were submitted, that the—

Mr. BEEDY.² Before this statement is made—I don't want to prevent the completion of it—it becomes my duty, I feel, to claim such privilege or immunity as Mr. Schuh has under the Constitution, and to say to him that after he has made this statement I shall instruct him not to answer any more questions, and, of course, the committee may force him to do so as it has the right.

The CHAIRMAN. Now, perhaps before that point is reached I think we might better have the document offered to the witness by Mr. Cox, if you please.

Mr. BEEDY. I understand reference is made to one of the bulletins.

The CHAIRMAN. This will identify it now, Mr. Beedy, please. Mr. Cox, do you have it?

Mr. Cox. I have the original document here, which was introduced in evidence last week, Thursday and marked "Exhibit No. 1266," which I now hand to Mr. Schuh.

Mr. BEEDY. Now, Mr. Chairman, the document having been identified—

¹ Included in Hearings, Part 16, appendix, p. 9307.

² Carroll L. Beedy, attorney for Mr. Schuh. See Hearings, Part 16, p. 9147, for Mr. Beedy's statement as to the witness's need for advice of counsel at the committee table.

The CHAIRMAN (interposing). It hasn't been identified as yet.

Mr. SCHUH. I recognize the document as one of the bulletins issued by the Association.

The CHAIRMAN. This is the document, then, to which you referred when in response to the question of Mr. Lubin you said that though it was not prepared by you it had been passed upon by the Ways and Means committee, you assumed?

Mr. SCHUH. It was, they having signed it.

The CHAIRMAN. But you recognize it as a circular that was issued by the N. A. P. R.?

Mr. SCHUH. By the Ways and Means committee of the N. A. P. R.

Senator KING. Was it endorsed by the organization before it was put out?

Mr. SCHUH. Well, this committee has the authority to develop the policy and program of the association.

Senator KING. Are you a member of that committee, Ways and Means committee?

Mr. SCHUH. I was not, excepting ex officio as president. I would like to say this relative to this and any of the other bulletins of this kind that were put out, that I did not write them and that they were prepared—I imagine prepared in the office, submitted to legal advice, what little we could afford, and passed by the committee. I would like to call the committee's attention, also, to the fact that the men mentioned here are all operators of service stations, running relatively small units.

The CHAIRMAN. Your testimony is that this is an official document of the association of which you at one time were president, of which you are now the chairman of the board; that it was submitted to the counsel of the association, passed upon and cleared by that counsel, passed upon and approved by the Ways and Means committee, and issued by the Association.

Mr. SCHUH. I presume that that is a correct summary of the facts.

The CHAIRMAN. Well, it is a correct summary; is it not?

Mr. SCHUH. To the best of my knowledge.

Mr. Cox. There are one or two questions I would like to ask if I may. Can you tell us, Mr. Schuh, whether the Association keeps a file of all circular letters which are sent out?

Mr. SCHUH. I believe we do now.

Mr. Cox. Did you at the time this letter was sent?

Mr. SCHUH. I don't know.

Mr. Cox. Do you know where that file is?

Mr. SCHUH. I don't know whether there was one, that there was a file at that time. I might say this, that everything that we have in our records has been sent down here. I was asked what to send and I looked at the subpoena and said, "Move the office down," so that everything that we had is here, and if it isn't here I would say that there is none, because nothing was disturbed.

Mr. Cox. I ask these questions because although we made very diligent search of the records which were produced in response to the subpoena we were unable to find any copies of this circular letter or of any other circular letter, and I was going to inquire whether you could give us any assistance in the search for those documents.

Mr. SCHUH. Since this was put out we have moved and since Mr. Shanks has left the Association some 2 years ago we have cleaned

out a lot of these bulletins and they probably were never filed, because the supply was on a little shelf that we have, and that was cleaned out and probably we never filed it, but I do know that lately every bulletin that has been sent out to the association has been filed. Since we are in the new offices I am quite positive that every one that has been sent out was filed, or at least instructions were given the office to file them.

Mr. Cox. You have no suggestions as to what steps the committee might take to find a copy of this circular in your file or copies of other circulars of the same kind issued at about the same time?

Mr. SCHUH. When does it refer to?

Mr. Cox. There is no date on the document itself, but I think—

Mr. SCHUH (interposing). What does he call it?

Mr. Cox. It is headed "Circular letter." It is headed "National Association of Petroleum Retailers, Ways and Means Committee, 251 Republican Hotel, Milwaukee, Wis. Raising prices. Do's and don't."

Mr. SCHUH. That is this one.

Mr. Cox. Yes.

Mr. SCHUH. That is this one. I don't know where you would find another copy of it; that is over 3 years ago.

The CHAIRMAN. When was it exactly, do you know?

Mr. SCHUH. I can only say by memory. There is no date on here. Somewhere the latter part of 1936.

The CHAIRMAN. What was your position with the association at that time?

Mr. SCHUH. President.

The CHAIRMAN. Any other questions, Mr. Cox?

Mr. Cox. No.

The CHAIRMAN. Now, did you want to ask any questions with respect to the document itself?

Mr. Cox. Yes.

Mr. BEEDY. To save time, do I understand counsel is going to pursue questioning about this bulletin, the "Do's and Don't's" bulletin?

Mr. Cox. That is correct.

Mr. BEEDY. Then because the provisions of the statute seem to make it incumbent upon me to raise the question of immunity, I do instruct the witness not to answer any questions, and to claim his constitutional privilege.

The VICE CHAIRMAN. Mr. Beedy, do you raise that point generally as to any question with reference to this bulletin?

Mr. BEEDY. Yes, sir, Mr. Congressman; because he said that he did not write, did not assist in the preparing of it, and knew nothing about it except that he was told that it had been submitted to counsel.

Senator KING. Is it based upon the grounds that it has not been sufficiently identified or sufficiently shown that he approves and endorses it?

Mr. BEEDY. I think I may state that my objection is based upon the grounds of some considerable question as to the propriety of that bulletin, and the provision in the statute creating this committee which brings forward and makes operative here that provision with reference to immunity which was contained in the Public Utilities Act of 1935, and which provides that any statement made by a

witness here, or because of it, he will not be prosecuted, and no forfeiture or penalty will be imposed upon him, his immunity having been claimed. Therefore, I claim the immunity and instruct the witness not to answer. This committee has full authority to force him to do so, and he is then protected.

The CHAIRMAN. It is recognized, in other words, by the witness and by his counsel that the witness is not excused from refusing to answer questions. He must answer any question that is propounded but if he does answer, after having claimed this immunity, he may not be prosecuted for anything that may be revealed by his answer except in the case of perjury.

Mr. BEEDY. That is precisely my understanding of it.

The CHAIRMAN. That being the understanding, of course the committee may proceed in asking any questions that it may desire.

Mr. O'CONNELL. Mr. Chairman, I may be a little obtuse on it, but I don't understand that is exactly the situation. As I understand it, the witness has the right to claim immunity on the basis of the fact that a question or a line of questions may tend to incriminate him, and if he takes that position based upon questions which would reasonably tend to incriminate him, he may not be forced to answer without being granted immunity. I have heard no questions asked of the witness yet—

The CHAIRMAN (interposing). This was all preliminary.

Mr. O'CONNELL. But I don't understand that any question which is now asked of the witness is one in which he is necessarily granted immunity at this point. From all counsel for the witness has indicated, I see no basis for the claim at all, as I understood you to say, prefacing your claim, the witness did not prepare the statement, he has no personal knowledge, possibly, as to its contents, and if that be so I rather fail to see the basis for your claim of immunity as to what he is threatened by the questions that have not yet been asked.

Mr. BEEDY. I am trying to make what I think is a proper record.

The CHAIRMAN. In other words, to save the record and expedite the hearing, he is making a sort of blanket claim of immunity. I fancy that there will be no special objection to that. It was just preliminary, Mr. O'Connell, and, of course, the witness, I think, would have to make the claim himself when a question which he thinks may incriminate him is propounded.

Mr. O'CONNELL. I will be satisfied if it is understood that the immunity does not exist as regards any particular question that is asked from here on unless claimed by the witness and granted by the committee. In other words, I might want to ask the witness a question and he might desire to obtain immunity and for that reason refrain from answering unless granted immunity. It then might follow that I would rather he did not answer the question.

The CHAIRMAN. I don't want to get into a debate with you, Mr. O'Connell, but I don't believe the committee has any authority to grant or withhold immunity. The immunity is granted by the law. The law says that a witness must answer any question propounded by this committee, but if he claims immunity he may not be prosecuted for anything he reveals thereafter, except for perjury, and we have no jurisdiction to say the witness is immune or is not immune. All our right is to ask questions and compel the answer and then it is in the courts to decide whether or not there is any right in-

fringed or whether any violation of law which is cognizable in the courts has been revealed.

Mr. O'CONNELL. Mr. Chairman, I don't want to labor the point, either, but from my standpoint if I ask the witness a question and he claims that he is entitled to refuse to answer on the grounds that it may tend to incriminate him, I then have the option of not pressing the question, and in that event no immunity for prosecution as regards the transaction arises.

The CHAIRMAN. Of course, if there is no answer, there is no immunity claimed.

Mr. O'CONNELL. But he doesn't have to answer unless the person putting the question presses it.

Mr. BEEDY. If no answer is given, there is no evidence upon which to base prosecution, so it is all the same.

Senator KING. Assuming that a bulletin or paper is tendered and the witness is asked concerning it and if it be conceded by any and all persons that there was nothing in it which would tend to incriminate the witness, would he be justified in claiming immunity?

Mr. BEEDY. I have stated, Senator, that the reason I am making this claim to immunity is because there are grave doubts in my own mind as to the legality of certain of the phrases, provisions, of this particular document. If I thought there was nothing about it that was harmful, I certainly shouldn't claim any immunity.

Mr. SCHUH. I don't believe that I could agree to any interpretation put on that; just leave it that way. It is very general and vague.

Mr. Cox. What methods were contemplated by the association to control secret discounts?

Mr. SCHUH. The principal method used by the association to control secret discounting was under the N. R. A. through the code committees. In the State of Wisconsin and other States having a price posting act by proper procedure under the provisions of whatever act provided for price posting.

Mr. Cox. Well, this circular was issued after the N. R. A. Code had ceased to have any legal effect, did it not?

Mr. SCHUH. Yes; but you asked what procedure we pursued.

Mr. Cox. Well, what procedure did the association have in mind when this policy was formulated as of the day it was circulated?

Mr. SCHUH. The application of the existing laws of the various States.

Mr. Cox. Are there laws in every State in which you have members against secret discounts?

Mr. SCHUH. Not in every State, but in many States.

Mr. Cox. Was this circular only to go to States in which there were laws against secret discounts?

Mr. SCHUH. I can't answer that; I don't know.

Mr. Cox. Well, assume for a moment that it was sent to all of your membership, it would go to some States where there weren't such laws, would it not?

Mr. BEEDY. I object.

Mr. Cox. I think by taking a little time I could demonstrate pretty conclusively even to your satisfaction that it was sent to most of the membership, and in view of that fact I think it is only reasonable to indulge in that hypothesis.

Senator KING. I think possibly it may be in the twilight zone between alleged violation of law——

The CHAIRMAN. Let us not talk about twilight and darkness.

Mr. BEEDY. I am trying to perform my duty conservatively.

The VICE CHAIRMAN. May I make this suggestion? I don't know what there is at all in the proposition, but the committee ought to be given an opportunity in reference to each of these questions to determine whether or not when pressed for an answer, it should not exempt the witness from prosecution and would prefer not to have the testimony than to give the exemption by asking the question. I think we could.

The CHAIRMAN. Well, I think that is correct.

The VICE CHAIRMAN. We can handle that as we run along.

The CHAIRMAN. The chairman has been endeavoring to present this matter in an orderly fashion. That is why the Chair wanted Mr. Cox to present the document and have it identified. It has now been identified by the witness. Now no question has been asked as yet and the witness has himself not as yet claimed his immunity.

Now I think the regular course is for Mr. Cox to present a material question and then the committee can decide whether it desires to pursue the matter, or to allow it to rest upon the claim of immunity. The document is in the record.

Mr. Cox. I shall pursue that line, if I may, Mr. Schuh——

(Conference between Mr. Schuh and Mr. Beedy.)

Mr. Cox. Do you recall when you first saw this document?

Mr. SCHUH. No; I don't recall the first time I saw the document.

Mr. Cox. When did you first know the document had been circularized by your association?

(Conference between Mr. Schuh and Mr. Beedy.)

Mr. SCHUH. I would like to at this time claim my immunity under the Constitution.

The CHAIRMAN. You refuse to answer on the ground that your answer might incriminate you?

Mr. SCHUH. Yes, sir.

The CHAIRMAN. Is it the desire of the examiner for the committee to proceed in the matter?

Mr. Cox. I am content to have it stand that way and to have the claim of privilege remain upon the record, and I do not insist upon the committee pressing the matter, but I should like to ask some more questions, to have the record perfectly clear. I will only ask a few.

The CHAIRMAN. Very well.

Mr. Cox. Will the reporter please read the last question?

(The question was read by the reporter.)

Mr. Cox. I now ask you, Mr. Schuh, whether you saw the document before it was circularized by your association?

Mr. SCHUH. No; I did not see it before it was circularized.

Mr. Cox. Then is it your testimony that you saw it for the first time after it was placed in the mails?

Mr. SCHUH. May I hear that question again, please?

(The question was read by the reporter.)

(Conference between Mr. Schuh and Mr. Beedy.)

Mr. SCHUH. I don't remember when I saw it the first time.

Mr. Cox. Do you know to whom it was sent?

Mr. SCHUH. No.

Mr. Cox. Well, do you know whether it was sent to anyone?

Mr. SCHUH. I don't know that it was sent to anyone.

Mr. Cox. You testified a moment ago you were a member of the executive committee *ex officio* at that time; is that correct?

Mr. SCHUH. The Ways and Means committee, but I did not attend all their meetings.

Mr. Cox. Did you attend any meeting of the executive committee of the Ways and Means committee where this circular letter was discussed?

Mr. SCHUH. No; not to the best of my knowledge.

Mr. Cox. Does that committee keep minutes of any kind?

Mr. SCHUH. After a fashion.

Senator KING. Did it have a secretary?

Mr. SCHUH. Mr. Shanks was secretary.

Senator KING. Was he secretary then?

Mr. SCHUH. Yes; of that committee.

Senator KING. Is he still secretary?

Mr. SCHUH. No.

Senator KING. If minutes were kept, in whose possession would they be?

Mr. SCHUH. They would probably be in our records here some place. I would like to volunteer this information. I don't believe it was until later, considerably later, that they actually kept minutes of the meetings. I believe it was pretty nearly a year later before they had a regular procedure of keeping minutes. The fact that it was signed by the three indicates that here is a document that they went over, and signed it, and that was it.

Mr. Cox. Well, Mr. Schuh, were you familiar, at the time that this circular letter was prepared, with the policy of your association?

Mr. SCHUH. Yes.

Mr. Cox. And was that policy determined by the Ways and Means committee?

Mr. SCHUH. Yes.

Mr. Cox. Did you take any part in the determination of the policy?

Mr. SCHUH. I would like to claim my immunity under the Constitution on that question.

The CHAIRMAN. You make the same claim you did before?

Mr. SCHUH. The same claim.

Mr. Cox. My disposition is the same now as it was before. Now, I call your attention to the item No. 4 in this circular letter, under the heading "Things Not to Do." Item No. 4 reads as follows: "Attempt a price raise until you have secret discounting under control." And I ask you whether that injunction to your members is an accurate statement of the policy of your association at that time?

Mr. SCHUH. Will you repeat that question?

(The reporter read the question.)

Mr. SCHUH. I would say that that represents definitely a policy of the organization to do everything to bring secret rebating and discounting under control.

Mr. Cox. And was that a policy which you in your official position with the association had approved?

Mr. SCHUH. Yes; I believe that the record is very clear throughout my entire stewardship of that group that I was opposed to secret rebating.

Senator KING. Supposing that paragraph implies more than secret rebating, do you approve of the legitimate and proper interpretation that would follow the wording of the provision? It may call for a conclusion, but if you can answer it I would be glad. If not, I shall not press it.

Mr. SCHUH. Could I have that read?

(The question was read by the reporter.)

Mr. BEEDY. I want to make my position clear. For this man to determine on the spur of the moment whether a single question, if answered, might make him liable to prosecution for offense which is criminal under the antitrust law, is some task for any lawyer, and therefore, because I apprehended that all these questions would be directed to that very thing it might take me some weeks even to decide whether it was a question that shouldn't be answered. I can see only one way to protect my client's rights and that is to make a blanket objection to all these questions with reference to the policy set forth in this document, his knowledge as to when it was printed—

The CHAIRMAN (interposing). The chairman recognized the position which you took as counsel for the witness and the committee has been perfectly willing to permit you to sit beside him and to advise him with respect to these matters, although I think it will be recognized that as a matter of right he probably couldn't demand that his counsel sit beside him, but that is neither here nor there. But the chairman sought to have this matter brought before the committee and placed upon the record in an orderly fashion, and the chairman felt that the claim of immunity by counsel would not be sufficient, therefore it was suggested that questions be asked by Mr. Cox formally for any disposition that the witness himself made. Now, if the witness desires to claim his immunity on these questions, that then raises the question as to whether or not as a matter of policy the committee will insist upon an answer or whether it will allow the matter to stand in that way. Mr. Cox has already indicated quite clearly that it is his disposition to recommend that the matter be dropped upon the claim of immunity.

Mr. BEEDY. Then in order to save time—

The CHAIRMAN (interposing). Let the witness answer.

Mr. BEEDY. Let the witness refuse to answer each question without stopping to try to analyze its legal significance.

The CHAIRMAN. That will be the procedure.

Mr. BEEDY. The witness declines to answer.

Mr. COX. Now, Mr. Schuh, I call your attention to paragraph 6 under that same heading of things not to do, which reads as follows [reading from Exhibit No. 1266]:

Attempt a price raise until you have a sufficient following among the retailers to insure its being general.

I ask you if that is an actual statement of the association's policies.

Mr. SCHUH. I decline to answer that.

The CHAIRMAN. On the same grounds?

Mr. SCHUH. On the same grounds.

Dr. LUBIN. Mr. Chairman, what is the disposition of counsel?

Mr. COX. My disposition is the same with respect to all of the answers.

Then I call your attention—in the interest of brevity I am going to cut this short—I think I will ask only one more question with

regard to paragraph 17 under the heading "Things to do," and that reads:

If you have to use the blockade method, be sure that it is friendly and peaceful, so as to prevent injunctions for disturbing the peace or disorderly conduct or assault, conducting yourselves as customers who are making small purchases, and utilizing the free services which the station offers to the public, and block the driveway for a short time only, but during the busiest part of the day—

and I ask you whether that is an accurate statement of the association's policy.

Mr. SCHUH. I must refuse on the same grounds.

Mr. Cox. My disposition is the same, and I think with that I shall abandon this questioning.

The CHAIRMAN. The disposition of counsel for the committee in this hearing is to allow the matter to rest so far as the examination of this witness is concerned upon this document. Do any members of the committee desire to pursue the matter?

Dr. LUBIN. Mr. Chairman, I should like to ask Mr. Schuh whether it is customary in his organization for the Ways and Means committee to circularize memoranda or letters to the membership without the authority of the officers.

Mr. SCHUH. They are the officers.

Dr. LUBIN. Without the authority of the president or without his knowledge?

Mr. SCHUH. I believe that that has been done.

Mr. LUBIN. Is it the policy to circularize them without the knowledge of the chairman of the board?

Mr. SCHUH. I don't believe there was a chairman at that time.

Dr. LUBIN. Can you give us for the record such instances where circular letters have been sent to members without the knowledge of the president or chairman of the board or both?

Mr. SCHUH. No; I can't, offhand.

Dr. LUBIN. On what grounds, then, do you believe that it has been done?

Mr. SCHUH. Nothing to stop it.

Dr. LUBIN. Do you know whether it has been done?

Mr. SCHUH. I believe it has been done.

Dr. LUBIN. Do you know whether it has been done?

Mr. SCHUH. Without picking out a particular circular, I wouldn't know.

Dr. LUBIN. So you don't know whether it has been done or not?

Mr. SCHUH. I believe it was done in this instance.

Dr. LUBIN. But you do not to your knowledge know?

Mr. SCHUH. I know that on occasions there have been circulars going out. You asked for a particular instance, and I have been thinking of one; a labor policy that we put out I didn't see before it was circularized.

Dr. LUBIN. I should like to ask you relative to "Don't No. 8," namely, "Don't attempt price raise until you have sufficient following among the retailers to insure it being general."

Has it been the policy of your association, either with or without your consent, to attempt to get your membership to follow such a policy?

Mr. SCHUH. I must decline to answer that.

Dr. LUBIN. Mr. Chairman, I insist that the witness answer.

Mr. O'CONNELL. Just a moment, Dr. Lubin.

Dr. LUBIN. I withdraw my request.

Mr. BEEDY. I will be very glad to have him testify.

The CHAIRMAN. I will say for the benefit of the committee that the disposition of the chairman is to follow the suggestion of Mr. Cox and to allow the matter to rest. The witness has formally claimed his immunity, has declined to answer these questions dealing with this particular document upon the ground that to do so would tend to incriminate him. The document is in the record; it speaks for itself.

Mr. BEEDY. "Might" tend to incriminate him.

The CHAIRMAN. Might tend to incriminate him.

Mr. Cox. I would like to ask the witness with respect to this document, "Exhibit No. 1266," whether the record and the letters in the upper right-hand corner—to wit, "Bulletin WM-1"—have any significance to him. Specifically, do those words and letters indicate that this bulletin is the first of a series of bulletins?

Mr. SCHUH. I believe it is a little gingerbread that was put on to make it look a little bit more important.

Mr. Cox. It doesn't mean anything?

Mr. SCHUH. It may have been the first of a series. I think it was put there more for that purpose, because on other occasions he put two or three other letters with No. 1 and 2 and so on.

Mr. Cox. Have you ever heard of a bulletin of your association lettered "No. WM-7-1236" and entitled "Dulling the Chisels"?

Mr. SCHUH. I seem to have some recollection of the title "Dulling the Chisels."

Mr. Cox. It is a very good title. I think that is a bulletin, as a matter of fact, that was sent to you yesterday. Do you have a copy of that?

Mr. SCHUH. Yes; I have it. Is that the blockade bulletin?

Mr. Cox. Mr. Schuh, you have the advantage of me, because I am not sure that I have ever seen it.

Mr. Schuh, I call your attention to the fact that this bulletin, like the other one, contains in the upper right-hand corner the words "Bulletin WM-7-1236." Does that suggest to you that there were other bulletins of the same kind which followed the one we were looking at a moment ago, "Exhibit No. 1266"?

Mr. SCHUH. I don't know what the numbering means, excepting I believe it is some gingerbread up here.

Mr. Cox. Gingerbread in both cases?

Mr. SCHUH. It may mean—"WM" may mean Ways and Means No. 7, but what the 1236 means—it sounds like football signals to me.

Mr. Cox. The fact that this bulletin is numbered "WM-1" and the fact that that is numbered "WM-7" indicates that there may have been some intervening bulletins?

Mr. SCHUH. That is possible.

Mr. Cox. This bulletin, entitled "Dulling the Chisel," is cast in the form of an allegory or fiction. The chairman may wish to look at it.

Mr. SCHUH. I would like to point out to the committee that this bulletin, like many of these bulletins, I don't remember ever having seen before they went out. I never read them through until I got

this one, and I had nothing to do with their preparation, so that my knowledge is definitely limited.

Dr. LUBIN. Mr. Schuh, how does your association define a chiseler? What is a chiseler so far as your association is concerned?

Mr. SCHUH. I would prefer to take the definition that President Roosevelt placed upon a chiseler, when he first advocated the N. R. A., and that is "That 10 percent in any industry that through unfair trade practices cuts the price, much to the detriment of everybody else in the business."

I think he did a better job than anybody I know.

Dr. LUBIN. Would you accept the President's definition of unfair trade practices?

Mr. SCHUH. I don't know what his definition is.

Dr. LUBIN. Then how can you accept the definition of the word "chiseler" if the fundamentals of it you don't know?

Mr. SCHUH. I heard his speech.

Dr. LUBIN. You say you don't know how he defines unfair trade practices?

Mr. SCHUH. I don't remember how he defines them, but whatever he said at that time impressed me with being pretty good sense.

Dr. LUBIN. What would you say would be the unfair practices that characterize the chiseler?

Mr. SCHUH. Well, indiscriminate price cutting with the object and intent of gaining a huge volume in order to undersell everybody else. I might illustrate it—I am limited in just what I can say. I try to be practical, but we will take a marketer who moves into Milwaukee and opens a station, buying at wholesale and selling at retail. He cuts the price 5 cents a gallon so that he actually loses money in that operation until he has built up a large volume, and then, with every price change, he moves up a little bit closer to us, so that now, having the volume, he starts to get the money back out of the public. I think that, in my estimation, would be a chiseler of the first magnitude.

Senator KING. I would like to ask one question, if you have passed out of the realm of this pamphlet.

Did your organization, as far as you know, attempt to impress upon other retail organizations whatever policies, good, bad, or indifferent, that were followed by your organization?

Mr. SCHUH. Did we try to impress upon them—

Senator KING (interposing). Try to get them to adopt your policies, and to join with you—I will pause right there.

Mr. SCHUH. Well, we, at all times, attempted as an organization to develop sound marketing policies and to sell them to our members.

Senator KING. Yes; but did you go outside of your own members and try to induce other organizations outside of Milwaukee in other parts of the United States to follow the practices which you were seeking to inaugurate?

Mr. SCHUH. You mean other retail dealer organizations?

Senator KING. Yes. Outside of your association. In other words, did your association confine its activities to members of its association, or did it seek to extend its operations into other fields and to induce other associations in other parts of the United States to adopt practices in part or in whole which characterized the operations of your organization?

Mr. SCHUH. Well, we always attempted to get more members, and in doing so, we naturally had to explain the policies and the program of the national association, so that we naturally talked to other groups and advised them with their problems and on our policies in different parts of the country.

Senator KING. Did you try to undermine other groups or other associations to get members of those associations to become members of yours?

Mr. SCHUH. No; we never undermined any.

Senator KING. Did you try to cooperate with other organizations and have them adopt in part or in whole policies and measures which you and your organization adopted and followed? I am trying to ascertain whether you were, so to speak, a lone wolf going by yourself, or whether you were trying to impinge upon other fields and bring other organizations, either by coercion or persuasion or any other methods you might adopt, to come within the operation of your organization.

Mr. SCHUH. We did everything we could to get new members. When I say everything we could, everything we could legitimately.

Senator KING. Did you try to get other organizations of retailers in various other States to join, to adopt the policies of your organization, so they would be sort of integrated?

Mr. SCHUH. Yes.

Senator KING. So that they would adopt your policies, and to that extent increase the monopolistic power of your organization, if it had any monopolistic power.

Mr. SCHUH. We never had any. I would like to explain again that at no time would it be possible to get the majority of dealers, I don't know where it has ever been done, even in one town. I found out, much to my surprise today, that there is a new organization in Washington. We had one here at one time but they died, and I heard one was formed, but hadn't paid much attention to it, and I find there is one here today that doesn't belong to our group, and I don't believe we have ever contacted them and they have been in existence, I think, for over a year.

The CHAIRMAN. Mr. Cox, you had no desire to offer this allegory?

Mr. Cox. No.

The CHAIRMAN. I might remark it is not an allegory, it is a fairy story, according to its own designation.

Mr. Cox. I suppose a fairy story may be an allegory. One of the finest allegories of all times was entitled "the Faerie Queene."

Mr. Schuh, I am now going to call your attention to a memorandum which was found in your file, which I shall show you in a moment, which reads as follows:

From N. A. P. R. Executive Division—12/15/37.

To W. A. M. C. Note: To be Given Immediate Attention.

Suggestion: Send letter to industry—letter to be confidential with request to destroy, requesting statement from them denying their intention to go into retail field with key stations in 1938, this letter because of recent stories concerning the above action.

Can you tell the committee by examining this document who wrote it and to whom it was addressed?

Mr. SCHUH. I don't know who wrote it.

Mr. Cox. Have you ever seen it before?

Mr. SCHUH. No; I have never seen it before.

Mr. Cox. Do you know whether that suggestion was acted upon?

Mr. SCHUH. Yes.

Mr. Cox. Was it acted upon?

Mr. SCHUH. Yes.

Mr. Cox. And a letter was sent to the industry in the words of this memorandum?

Mr. SCHUH. Every supplying company got a letter.

Mr. Cox. To all the major oil companies?

Mr. SCHUH. And the larger independent refiners, everybody that we know of that markets any size at all, over any appreciable area.

Mr. Cox. Could you assist the committee in any way in getting a copy of that letter, because we have been unable to find it.

Mr. SCHUH. I assisted in the preparation of the letter.

Mr. Cox. I am asking you now whether it would be possible for us to see a copy of it, because we have been unable to find it in your files.

Mr. SCHUH. I wouldn't know where there would be a copy of it.

Mr. Cox. Did the letter in fact contain a request that it be destroyed after receipt?

Mr. SCHUH. I wouldn't remember that. It wasn't a usual procedure that we followed, I know.

Mr. Cox. If it wasn't usual, that might be an additional reason why you would remember.

Mr. SCHUH. Yes, I would have remembered. I would say that we obtained, and that as a result of the letter which wasn't—wait a minute, it wasn't a confidential letter, as I remember it. It was not a confidential letter, it was a letter that was sent to every company asking for a public statement.

Mr. Cox. And your testimony now is that it didn't contain a request that it be destroyed?

Mr. SCHUH. Because it was not a confidential letter, I know.

Mr. Cox. What is the N. A. P. R. executive division?

Mr. SCHUH. The executive division at that time was composed of the executive secretary and the office staff, along with the president.

Mr. Cox. Were you the president at that time?

Mr. SCHUH. Yes.

Mr. Cox. So that this memorandum at least on its face purports to come from a division of which you were a part.

Mr. SCHUH. (Affirmative nod.)

Mr. Cox. But you don't remember ever having seen it before?

Mr. SCHUH. No. I know how it originated.

Mr. Cox. How did it originate?

Mr. SCHUH. My instructions to the office to make a note that we ought to get a statement from the companies whether they were going to come back into the retail field or not, because at that time there were rumors circulating that this company and that company was contemplating entering the retail field.

Mr. Cox. When you made that suggestion did you also suggest that the letters be confidential and contain a request to be destroyed?

Mr. SCHUH. No.

Mr. Cox. Who is W-a-m-s?

Mr. SCHUH. Wams, the Ways and Means Committee.

Mr. Cox. I see. A moment ago you said you didn't know where we could get a copy of that letter.

Mr. SCHUH. I don't have a copy of it, I know, and there was nothing to—yes, I think I know where you can get a copy. It was published in the Gasoline Retailer.

Mr. Cox. Published about 2 weeks after this?

Mr. SCHUH. Yes. It was an open letter. It comes more clearly to my mind. I think it was an open letter to all companies saying: Are you coming in or are you not? So it would tend to make lessees more secure. The fellows were sitting in the stations with rumors that companies were coming back in with key or pilot stations and we felt an expression by the industry at that time would help the lessees and they would feel more secure that they were going to be in their stations a year or two years from then.

Mr. Cox. Did you talk to anyone in the major companies about this situation?

Mr. SCHUH. Yes; I believe I did.

Mr. Cox. Whom did you talk to?

Mr. SCHUH. I believe I talked to the Standard Oil Co. of Indiana; I believe I talked to the Shell Petroleum Co.

Mr. Cox. Did you talk to Mr. Arnott?

Mr. SCHUH. Not that I recall.

Mr. Cox. Did you talk to anyone else in the Socony-Vacuum?

Mr. SCHUH. Not that I recall. There is one other company that I can't place now because I remember it was a very definite answer "No," and why, but I just can't recall the company.

Mr. Cox. Can you explain why this memorandum should have contained the suggestion that the letters should be confidential and should contain a request to destroy? If you can't explain it, of course, that is all right, but I am curious to know.

Mr. SCHUH. I can't explain any such request.

Mr. Cox. Now, this morning I think you testified, when I asked you about the sources of your income, that you received certain income from services that you performed. What are those services?

Mr. SCHUH. Well, very often a company such as the Commercial Credit Co., who finance equipment, had a bulletin that they would like sent out, and they paid the postage and some expense on the clerical help and we inserted it, and sometimes the association wants some mail to go to our mailing list, and it is principally for mailing things to other people.

Mr. Cox. Well, do you get amounts of money in excess of the cost of that work?

Mr. SCHUH. Very often.

Mr. Cox. Now, there was a time, was there not, between 1936 and '37 and '38 when you had a steady source of income from the A. P. I., did you not?

Mr. SCHUH. No; never from the A. P. I., but we did have from the American Petroleum Industries committee.

Mr. Cox. Now, what is the American Petroleum Industries committee?

Mr. SCHUH. That is a committee of members or industry people in a State who are organized to fight taxes, gasoline taxes, principally in a State, and they are headed up into a central committee, as I understand it, called the Central Committee—the Central American Petroleum Industries Committee.

Mr. Cox. Do you know whether that has any connection with the A. P. I. at all or not?

Mr. SCHUH. I wouldn't know. I don't know.

Mr. Cox. Do you know who is the central organization of the American Petroleum Industries Committee?

Mr. SCHUH. I know some of the people; yes. There are jobbers and refinery officials.

Mr. Cox. I call the committee's attention to a booklet published in 1937 entitled "Petroleum Facts and Figures," published by the American Petroleum Institute. This book shows on page 223 the American Petroleum Industries Committee's staff, and this statement is immediately preceded by a list of the officers and members of the board of directors, executive committee, and the committee of the American Petroleum Institute. This leads me, at least, to the conclusion that there is some relation between the two organizations.¹

Mr. Cox. Now, Mr. Schuh, between '36 and '38 you did receive some payments from the American Petroleum Industries Committee, did you not?

Mr. SCHUH. Yes, sir.

Mr. Cox. And those payments varied from \$75 a month to around \$150 a month, did they not?

Mr. SCHUH. That is right.

Mr. Cox. And those payments continued until between about October 1936 to around June 1937, did they not?

Mr. SCHUH. I don't recall that they were regular. I mean, there may have been some months in there that they did and there may not; I don't recall that, but I would say that in that period we had done a great deal of mailing work, so that it is possible we received it.

Mr. Cox. What kind of work was that you did for the American Petroleum Industries Committee?

Mr. SCHUH. Well, I don't know how many thousands of tax dollars we mailed out, for instance. They were dollars showing that the average price of gasoline was so much, the tax was so much, and the total indicated the bill. There is a picture of one of them in here in the manual,² page 198; a picture of one of the dollars.

Mr. Cox. It was work mailing material of that kind largely, was it?

Mr. SCHUH. Yes.

Mr. Cox. Did you collect any material for them, distinguished from sending out material?

Mr. SCHUH. No.

Senator KING. Did they prepare it and deliver it to you for mailing?

Mr. SCHUH. Yes; they were sent up to us in bundles.

Mr. Cox. You just used your mailing list to send them out?

Mr. SCHUH. To send them out.

Mr. Cox. Now, was this—

The VICE CHAIRMAN (interposing). Mr. Cox, will you ascertain whether or not the mailing list was available to the persons for whom they sent the material out?

Mr. Cox. Yes; I will ask that precise question. Did you understand Congressman Sumners' question?

¹ The American Petroleum Industries Committee was created by the board of directors of the American Petroleum Institute in December, 1932.

² A service station manual published in book form by the National Association of Petroleum Retailers.

Mr. SCHUH. The question is, I believe, was that mailing list available?

The VICE CHAIRMAN. Yes. How did they happen to come to you to send out this material to which you refer?

Mr. SCHUH. Because a rule of our board of directors was that our mailing list was not to be given out to anybody.

The VICE CHAIRMAN. The answer is, then, it was not available to these people?

Mr. SCHUH. It was not available to anybody.

Mr. Cox. Were these payments you received in excess of the cost of the work that you did?

Mr. SCHUH. Possibly a little, but very little. Pretty much in the mailing because in the size it took it up in the cost of the wrapping and sending them out; took up most of it. There may have been a little excess, I believe. I would like to make the point that it wasn't an appreciable amount in excess of what it actually cost us.

The VICE CHAIRMAN. What was the total amount received from that source?

Mr. Cox. Between the records which our accountants have compiled, Congressman, it shows between October 1938 and May 16, 1938, the payments, gross payments, were \$1,932.10, about \$2,000.

Senator KING. To that company?

Mr. Cox. Of the American Petroleum Industries Committee. Those payments stopped sometime in 1937, didn't they?

Mr. SCHUH. I think they stopped about then. I don't recall any since then.

Mr. Cox. There have been none since then, but about the same time the payments stopped you started selling books to the major oil companies, didn't you?

Mr. BEEDY. Well, Mr. Cox, I refrained from saying anything this morning, but since further reference is made to the books I think the committee will recognize that they are following an authoritatively established and well-recognized precedent in the issuance of their books.

Mr. Cox. I think counsel was about to make a point which I wanted to make this morning and didn't feel I could, and I heartily agree with him, if I apprehend what is in his mind.

Mr. BEEDY. I should like to have you elicit from the witness what they first contemplated doing and what they finally did in the nature of this book.

Mr. Cox. I am not sure that I follow you there, sir.

Mr. SCHUH. Would you like to have me tell the story of the preparation of this book?

Mr. Cox. I have no objection. I thought that was done this morning.

The VICE CHAIRMAN. May I ask a question before you get to that, to see if there is any connection or not. At the time that these periodical payments ceased, was there any discussion between you or anybody connected with your organization and the major oil companies with reference to the stopping of the contributions, or whatever they were, with reference to mailing and their taking these books from you at the price indicated?

Mr. SCHUH. As far as we were concerned, there is no connection. We were rendering a service for this one thing of which—

The VICE CHAIRMAN (interposing). We understand about rendering the service, but as to the specific point at the time they ceased to make contributions, periodically, and the time they began to buy these books, right in that period of change, was there any discussion between you or anybody connected with your organization and the people who bought the books with reference to stopping the one and beginning the other?

Mr. SCHUH. No; absolutely not.

Senator KING. Was this service to which you have referred based entirely upon efforts to reduce taxes upon gasoline in the various States?

Mr. SCHUH. Yes.

Senator KING. Or to prevent an increase in taxes?

Mr. SCHUH. Both.

Senator KING. There was no relation, then, between your service in that regard and the sale of these books?

Mr. SCHUH. There was no relationship whatsoever.

Senator KING. Well, when you effected, if you did effect, any satisfactory results in preventing an increase in the gasoline tax, did they stop making those contributions?

Mr. SCHUH. Do I understand, the chances of an increase were over?

Senator KING. Yes.

Mr. SCHUH. Well, I believe that would for that particular year; it would be a good assumption that, starting in October to handle taxes and the legislatures meeting in January and by the end of June or May the legislatures mostly had adjourned, so that would be a natural time for a tax campaign, and I would say that that was—

Senator KING (interposing). Payments were made, then, during the tax campaign?

Mr. SCHUH. That is right. I would like to say that the original idea in putting out a book of this type was a data book, containing all sorts of data about automobiles, the various capacities, tire pressures, and we called it the N. A. P. R. Year Book, and we were just in the midst of preparing that and having articles written for it when the Democratic Year Book scandal came out, and we immediately killed it, and threw the whole thing away because the scandal was just such that we couldn't afford to even think of that, and we went to work on a new tack.

We found that there were any number of data books out, anyway, and that we would be just duplicating something that already existed.

The CHAIRMAN. You mean the plan that you were adopting when adopted by somebody else was called a scandal, and therefore you abandoned your own project?

Mr. SCHUH. No; I wouldn't say that.

The CHAIRMAN. That is what you said, isn't it?

Mr. SCHUH. No; I said that the name was so similar, not the type of book. I did not see—except I had a glance at a Democratic Yearbook—and possibly the picture of the President was worth the price they charged; I don't know. But we had no such inducement that we could put into any book to sell it; we had to have facts and figures, and we tried to develop a book that was valuable to the dealer, but there is a place, and even today—

The CHAIRMAN (interposing). But you didn't examine that other book?

Mr. SCHUH. I say I didn't.

The CHAIRMAN. So what you say about the other book is wholly hearsay?

Mr. SCHUH. Yes, sir; but I may be dwelling on this a little too long, but I am mighty proud of the book. I think it is—and I have a sheaf of letters—

The CHAIRMAN (interposing). And you want it distinctly understood that in your opinion it is not a scandal?

Mr. SCHUH. It is not a scandal and it is the finest book that was ever prepared for the service-station operators of this country, and the sheaf of letters that we have received from all over the world—this book is on every continent; Canada—we have sold any number of them up there—New Zealand, Australia, Germany, England, Cuba, South America; the demand for the book from others than oil companies, even though the number wasn't as great, indicates the value of this book. I have one letter in which a man says that he wouldn't sell his for \$100 if he couldn't get another, and I should add now that we only charge \$1.25.

Mr. Cox. I think at this point it might be appropriate for me to offer for the record a compilation which has been made by the accountants of the staff showing that, as of the present time, 26,076 of these books have been sold to the major oil companies. I am prepared, if the committee so desires, to have the accountant take the stand and testify to the computation. I have reason to believe it is correct, and if any inaccuracy is discovered, I would, of course, be willing to have it corrected.

Senator KING. I think the statement of the witness this morning would be corroborative of what you have just said.

Mr. O'CONNELL. Mr. Cox, do I understand you to say twenty-six-thousand-odd books have been sold to the major oil companies?

Mr. Cox. That is correct.

Mr. O'CONNELL. Have you any figures of the number of books sold by the organization in total?

Mr. Cox. The witness testified this morning about 27,000 have been printed.

Mr. O'CONNELL. How many have you left?

Mr. SCHUH. I don't know. I don't believe there are very many left.

Mr. Cox. Our staff is still working on some computations in connection with the sale of books.

The CHAIRMAN. The tabulation may be admitted.

(The tabulation referred to was marked "Exhibit No. 1306" and is included in the appendix on p. 9849.)

The CHAIRMAN. Let me ask what the price was to the companies? I observe that the book itself is marked \$2.50 a copy, but you just testified that you offer it for \$1.25.

Mr. SCHUH. The Tidewater Co. that has bought 5, 10, rarely over 10 at a time, has paid, I think, either \$1.75 or \$2 for it. Any company that bought from 25 to 100 paid \$1.75. I think I do have the figures here.

The CHAIRMAN. You didn't have any secret discount on these books?

Mr. SCHUH. No, sir. As a matter of fact, the Standard Oil Co. of Ohio, the bookkeeper made a mistake in adding up 1,000 times

\$1.25 and arrived at the figure of \$964, and mistakenly our office accepted the order with that price and we are now fighting to get \$36 to complete the \$1,000 that they owed us.

Mr. BEEDY. Possibly the Senator remembers this morning the witness explained that in a 500 order lot the price went down as low as \$1.25.

Mr. Cox. The organization is still soliciting orders for this book from the major oil companies, is it not, Mr. Schuh?

Mr. SCHUH. From anybody.

Mr. Cox. I specifically asked you about the major oil companies.

Mr. SCHUH. I can't speak for what the organization has done since September 14; I don't know, but up until the time I left, yes.

Here is a price list or order blank.

Mr. Cox. You have no reason to believe that that policy has been changed, have you?

Senator KING. You mean in the sale of books?

Mr. Cox. In the solicitation of orders from the major oil companies.

Mr. SCHUH. I should believe if they have any left they would try to sell them any place, to the major oil companies; even if the committee here would purchase a quantity, we would be very happy to sell them. I would say that we are making or did make——

The CHAIRMAN (interposing). You are not going to bill us for those copies you distributed this morning, are you? [Laughter.]

Mr. SCHUH. No, sir. We have been putting more effort into selling schools lately than anything else; that is up until the time I left the effort was made to sell schools. I don't have another one of these here. I would like to put the price list into the record.

The CHAIRMAN. Just read it into the record.

Mr. SCHUH. One to 9 copies, \$2.50 each; 10 to 24 copies, \$2 each; 25 to 99 copies, \$1.75 each; 100 to 499 copies, \$1.50 each; 500 or more, \$1.25 each.

I would like to add that the Phillips Co., for instance, is selling these manuals to their dealers at a profit.

Mr. Cox. Mr. Schuh, while you were president of the association you did have occasion from time to time to discuss with the major oil companies the competitive conditions existing in the marketing field in different areas?

Mr. SCHUH. As it applied to specific complaints?

Mr. Cox. Yes.

Mr. SCHUH. I did.

Mr. Cox. That is, if I understand your answer, complaints would come from your membership and you would take up the complaints with the major oil companies concerned and attempt to remedy the situation.

Mr. SCHUH. Yes; I believe that you found in the file a complaint file that is quite exhaustive.

Senator KING. Did your association attempt to give any preference to one major company in the purchase of oil over another, or did you indicate to the members of the association that they should deal with representatives of one oil company rather than all?

Mr. SCHUH. No. The membership in our association is composed of the customers or dealers of all different kinds of oil companies. We couldn't possibly urge them to buy from any one. They bought from whomever they wanted to.

Senator KING. You didn't try to influence, then, the members of your organization as to whom they should buy their oil from?

Mr. SCHUH. Never.

Mr. Cox. Mr. Schuh, I am going to call your attention to a document that purports to be a carbon copy of a letter which apparently was dictated by you, dated March 2, 1937, and addressed to Mr. Walter Teagle, Standard Oil Co. of New Jersey, New York City.

(The letter referred to was marked "Exhibit No. 1308" and is included in the appendix on p. 9850.)

It reads as follows:

Your attention is requested to the enclosed copy of a report to me concerning the market situation in New York. Although the report is self-explanatory it seems in order to add that the situation of unrest is probably more critical than realized. It is believed that you will agree with us that a complaint to the Federal Trade Commission at this time would be disastrous and that it should be avoided. The number of persons concerned is so small that immediate action by those involved to eliminate cause for complaint should be a simple matter. The leaders who have appealed to our office are trying to do a real job along constructive lines and deserve all the cooperation that can be given. They are on the spot, and national leaders may find themselves in a similar position if the complaint of the retailers is continued.

I have observed this condition at first hand during recent visits to New York and conferred there with the dealers upon it, advising them to keep the retailers in line until something could be done. Consequently I know that there is truth in the report and if you have information upon this subject your advice will be appreciated.

Will you tell the committee whether in fact you did write that letter.

Mr. SCHUH. Yes; I wrote the letter.

Mr. Cox. And were similar letters addressed to a number of other major oil companies operating in that area?

Mr. SCHUH. Every oil company operating in the New York area.

Mr. Cox. Just what was the problem that you were referring to in that letter?

Mr. SCHUH. It was a combination of second story sluggers and we had reason to believe some special deals that were made by contract in which dealers bought below other dealers, which was obviously to our way of thinking a violation of the Robinson-Patman Act, and we called their attention to it and as a result of it, I understand, most of the deals were canceled that could be canceled excepting those by contract for a length of time that couldn't be, but the situation subsided, the dealers in New York benefited thereby.

Mr. Cox. When you speak of second story sluggers, you mean that certain companies had distributors set up who were cutting prices and offering discounts?

Mr. SCHUH. Doing many things, offering discounts. As a result of this trouble here a price posting ordinance has since been passed, in the city of New York alone, which is unusual. I don't know of any other town or any other city that has a price posting ordinance.

The VICE CHAIRMAN. You mean they passed an ordinance to require that everybody buy gasoline at the same price?

Mr. SCHUH. Everybody that buys from any one station gets the same price as anybody else that buys from that station.

Mr. Cox. In other words, they could post any price they like but once the price is posted everybody has to buy at the same price?

Mr. SCHUH. That is right.

Mr. Cox. Did you receive this letter, Mr. Schuh, which is on letter-head 26 Broadway, New York, dated March 25, 1937, addressed to you and signed by R. T. Haslam?

Mr. SCHUH. Yes; I received that letter.

Mr. Cox. Who is Mr. Haslam?

Mr. SCHUH. I have only met the gentleman twice, I believe. I don't know his exact title.

Mr. Cox. Is he connected with some major oil company?

Mr. SCHUH. The Standard Oil Co. of New Jersey.

Mr. Cox. And this letter was in response, was it not, to your letter of March 2, which I just read? It so states.

(The letter referred to was marked "Exhibit No. 1307" and is included in the appendix on p. 9849.)

Mr. SCHUH. I believe so.

Mr. Cox. It reads in part as follows:

We feel sure there is no marketer of petroleum products in the eastern part of the United States who through the years has devoted more effort than this company to maintaining price parity between its several similarly situated companies. We continue to believe such price parity should be maintained. We are relatively a newcomer in the New York market. A newcomer in a market must be competitive to maintain any position. While we must be competitive, we continue to hope for the arrival of the time when we and our competitors will be able to maintain price parity to similarly situated customers.

Is it your testimony now that it is your opinion that price parity thereafter was established with similarly situated customers? Is that right?

Mr. SCHUH. I would say yes, in accordance with the established law. In other words, I think the Standard Oil Co. and every other oil company bent every effort to eliminate discrepancies within their own customers.

Mr. Cox. Did you receive replies from other major oil companies to that letter?

Mr. SCHUH. Were they in the file?

Mr. Cox. There were one or two, but not from all the companies.

Mr. SCHUH. Do you recall one from the Continental Oil Co.?

Mr. Cox. That is right. That is the only one I saw.

Mr. SCHUH. I think that is the only other one.

Mr. Cox. Those were the only two companies?

Mr. SCHUH. Yes.

Dr. LUBIN. Mr. Schuh, is there any relationship between price parity between competitors and posted prices?

Mr. SCHUH. I can only make an explanation. It is an involved question. Where you have large marketers operating in an area there can never be any appreciable difference in prices between them. There is usually what they call a market leader, who decides what his price shall be, and everybody in that area must follow that. If he doesn't follow it, if he goes below it, the so-called pacemaker will immediately meet his price, and if he goes above it he won't get any price. I mean it is a competitive situation because of the highly competitive nature of this industry. I wouldn't buy from the people I buy from if I could buy from Barnsdall considerably cheaper. I would immediately go to Barnsdall. I have no contract, and there are many more like me. I certainly wouldn't pay Socony-Vacuum a premium.

Dr. LUBIN. How do you reconcile that statement with the statement you made previously of instances where people come into a community and cut prices and maintain the cut prices? How can the other people stay in business? As you say, nobody would buy from them; everybody would meet that price cut.

Mr. SCHUH. I am drawing the distinction between big marketers and little marketers. The little marketer is the one that comes in and does that. I say little—Coryell is a good example. He operates some 500 stations in eight States, but he started out small and has come into localities and wormed his way in until he is a factor, and if Coryell gets too far out of line we have to meet him.

Dr. LUBIN. Well, as I understood your statement, you said that in the city of New York different retailers were selling gasoline at different prices. You wrote a letter to the Standard Oil Co.—

Mr. SCHUH (interposing). Let me correct you. One company. Some companies didn't do it; but we have no way of knowing what their secret contracts are.

Dr. LUBIN. But the retailers were selling gasoline at different prices.

Mr. SCHUH. Not necessarily, but certain companies, let's say the Jones Oil Co., is a big major oil company and Jones has three customers; to two of them he is charging one price and to the third a lower price, which is discrimination, and the fellow that he is selling at a lower price is out cutting prices to the detriment of the other two because he is getting a lower price. We say that that is wrong, it is a violation of the Robinson-Patman Act if it is persisted in. I don't know whether the act was passed at that time or not, but it certainly was in process of being passed.

Mr. Cox. Do you just object to such discrimination when it is illegal or do you object to it in any event?

Mr. SCHUH. I would say that we would be in no position to draw the line as to whether it was illegal or not. We object to price discrimination of any kind.

The CHAIRMAN. If you could draw a plan or a code for this industry what would be the principal points in that code?

Mr. SCHUH. That is a pretty big order, but I would say one, that through the Federal Government some help be given the refining section of this industry to the end that they can obtain a reasonable price for their refined products and have an established tank car market upon which we could build our prices.

The CHAIRMAN. Do you think the refiners do not get a fair price now?

Mr. SCHUH. It certainly hasn't been over the last 7 years, it hasn't been a fair price.

The CHAIRMAN. The refining industry as a whole in your opinion ought to have some help from the Federal Government.

Mr. SCHUH. I believe a modified cartel would do it. I don't believe in a cartel, but a modified cartel, where the Federal Government could watch and see that no practices that were not in the interests of conservation and weren't in the best interests of the public—I believe that should be closely watched. I believe a modified cartel that would allow the refining industry to set up some such agency as the Allocation Committee under the Petroleum Code

which worked out very well, having a fair tank-car price, to base other prices on.

The CHAIRMAN. What would be the supervisory powers of the Federal Government in this modified cartel?

Mr. SCHUH. The power to cancel the whole thing the minute that anything was done that wasn't in the best interests of the public.

The CHAIRMAN. You would clothe some committee with discretionary power to pursue this policy?

Mr. SCHUH. The President, or one of the Cabinet members.

The CHAIRMAN. What else would you do?

Dr. LUBIN. May I interrupt at that point, Mr. Chairman? Am I to understand you to say that in your opinion the prices that the public has had to pay have not been in their interest in the past 7 years?

Mr. SCHUH. Decidedly so. The prices have constantly been reduced.

Dr. LUBIN. It is against the consumer's interest, then, to have those prices reduced.

Mr. SCHUH. No; that isn't against their interests. That is in their interest.

Dr. LUBIN. I thought you had been stating that the situation during the past 7 years has been one in which public interest has not been—

The CHAIRMAN (interposing). Oh, no; you misunderstood; he said that the refiners were not profiting. The suggestion of his was not in the interest of the consumer, it was in the interest of the refiner.

Mr. SCHUH. The refiners. I am particularly selfish in this viewpoint because as long as we have small refiners we can tell the big refiners where to go. The minute the small refiners are put out of business we have nobody to buy from.

The CHAIRMAN. Is it your opinion that the small refiners are being put out of business under the present methods in the industry?

Mr. SCHUH. I wouldn't say they were being put out of business, but they have certainly had pretty tough scratching for the past 8 years, and I know any number of them that have had tough scratching and haven't been able to get any place.

The CHAIRMAN. And to what do you attribute that?

Mr. SCHUH. Vicious competition.

The CHAIRMAN. So your theory is that vicious competition should be brought under control by some form of Government supervision through a modified cartel.

Mr. SCHUH. I believe that that to me appears to be the best answer that I can think of. It kills the argument of Government control that everybody howls about, and it still protects the public, and I believe it is the duty of Congress to protect the public.

The CHAIRMAN. Do you howl about Government control, if everybody does?

Mr. SCHUH. If it gets too far.

The CHAIRMAN. But nevertheless you would set it up under a program if you had the power.

Mr. SCHUH. I don't call it Government control; I call it Government help.

The CHAIRMAN. Here you have a modified cartel by which I understand you to mean that the industry would in a sense fix its own prices and stabilize the entire industry—

Mr. SCHUH (interposing). No, no.

The CHAIRMAN. Subject to supervision by the Federal Government.

Mr. SCHUH. No.

The CHAIRMAN. Then I didn't understand you.

Mr. SCHUH. I will never go as far as clothing anyone with the power to fix prices. That isn't needed.

The CHAIRMAN. Then what would you have the cartel do?

Mr. SCHUH. The cartel should allow them—production is pretty well brought within control by State regulations. I think that refinery runs ought to be brought somewhere within control to meet the demand, so that there isn't homeless gasoline flowing around cracking markets.

The CHAIRMAN. In other words, you want to set up some sort of system by which overproduction of gasoline can be controlled?

Mr. SCHUH. Just as overproduction of crude oil is controlled by State governments today.

Mr. Cox. You want to apply the proration system to the refinery end of the business?

Mr. SCHUH. Proration or allocation.

The CHAIRMAN. But that you would have supervised by the Government?

Mr. SCHUH. Yes; I think it must be supervised by the Government. And then I believe that we ought to have just a Federal Trade Commission code approved by them, under their trade-practice rules, setting forth more or less broad general principles that are recognized unfair competition, and any meeting held ought to have a Government representative there.

The CHAIRMAN. What do you call unfair competition? What are the unfair methods that most offend your idea of what is right in this industry?

Mr. SCHUH. I believe that one of the most important is an open price posting rule to bring it right out into the light of day where everybody can look at it.

The CHAIRMAN. That is not an objectionable feature. That is one that you would recommend.

Mr. SCHUH. That is one I would recommend to curb a lot of these abuses, such as the second-story sluggers and those things, that could be cured by an open price posting system. Second, I would have a rule barring the subsidization of any company or service station or anybody else by a supplier.

The CHAIRMAN. Now what form of subsidy do you object to, principally?

Mr. SCHUH. Low rentals, better prices, furnishing them with all kinds of equipment, building driveways for them, giving them tanks, pumps—

The CHAIRMAN (interposing). You are referring to practically the same practices which were mentioned by Mr. Swensrud of the Standard of Ohio when he was describing to the committee the competitive methods used by the major companies.¹

Mr. SCHUH. Well, I didn't read his testimony, so I don't know.

¹ Sidney A. Swensrud, vice president, Standard Oil Co. of Ohio, whose testimony appears in Hearings, Part 15.

The CHAIRMAN. He mentioned secret discounts and driveways and buildings and the same practices which you have just now mentioned:

Mr. SCHUH. Mr. Swensrud is an excellent economist and I have a lot of respect for his judgment.

The CHAIRMAN. You would abolish all of those?

Mr. SCHUH. I would abolish all of those in so far as they created unfair competition.

The CHAIRMAN. Well, somehow you seem to be drawing a line. I would like to get it clear in my own mind just where you would draw the line and what you would permit and what you would prohibit.

Mr. SCHUH. I think in order to help this and help competition, that sales contracts of every type ought to be outlawed.

The CHAIRMAN. Do you have competition if you have supply control and prices posted.

Mr. SCHUH. Yes; very stiff competition. Every company has material to move and it is going to move it, and I don't think that you should go beyond a certain point when you have a foundation to build on. In other words, if you did, then you would have price fixing all the way up the line, and the tendency is to keep inefficient units in the business.

The CHAIRMAN. When is price cutting properly denominated second story slugging, and when is it properly denominated competition which you recognize as desirable?

Mr. SCHUH. When it is done by the so-called second-story slugger to accomplish an aim for a larger company that they wouldn't do themselves to break into a market. This company isn't in Washington. They want to get in here. So they come in and get no place. Then they put in a second-story slugger to come down to me and talk to me and say, "Schuh, if you take Jones' gasoline we will give you three nice computing pumps, we will give you a lift and paint your building, and if you need a new wash rack we will help you build it on." The company wouldn't do that, but the distributor would, and by getting a better price they are paying him for doing it; by giving him a better price they are paying him for doing just that thing. That isn't fair competition. If this company wants to come in it can come down to me and say, "We will sell to you and we have a much better product, and I will show you why," and convince me I should buy from Jones because they have a better product, then I think you have fair competition.

Dr. LUBIN. Does Jones have a better product?

Mr. SCHUH. That is open to argument.

Dr. LUBIN. Then what form does your competition take, if it is open to argument?

Mr. SCHUH. I think that the company whose product I sell has a better product, and I sincerely believe it has. They consistently try to bring to me a better product, and more helps to me to help me sell my merchandise, and that is the reason I changed.

Dr. LUBIN. What helps do they bring to you?

Mr. SCHUH. They have sales clinics two or three or four times a year, practically every season; and they have experts that tell us how to sell merchandise and how to grease automobiles, and all about the new cars. They come out with post cards that tie in with their ads, with my station's name on it, that I can send to my customers.

so that they pick up Time Magazine and they see an ad, and the next day comes a card from me with the same thing on it. All of those helps I consider valuable to me, and that is the only reason I changed.

Mr. O'CONNELL. Do I understand you recently changed the company with which you deal?

Mr. SCHUH. Yes.

Mr. O'CONNELL. And I would also understand you to mean that the methods that they used in persuading you to change were what you would consider to be proper and legitimate methods.

Mr. SCHUH. Yes, sir.

Mr. O'CONNELL. Suppose you tell us what they did to persuade you to change?

Mr. SCHUH. Having had the experience and having seen the different companies as well as I have, they didn't have to do much to sell me, and I changed to that company and kept it quiet for fear of being pestered by everybody else in town for a week before I was ready to change. I kept it quiet and just decided to change to this company, and so notified them. If not, all of them would have bought my dinner for a week and I would have got no work done.

Mr. O'CONNELL. I take it you were probably approached by the company and were to some degree at least persuaded to change from another company. Now I want to know, if you can tell me, what inducements or what considerations led you to change from your prior supplier to your present supplier.

Mr. SCHUH. Just my knowledge of that company. They came down and went through their whole book, which was a waste of time, because I knew what the company was putting out and nothing was discussed as to what you are going to give me, excepting that I was trying to arrange for a lease on the property that I have from my landlord, and I said to the vice president of this company, "If I can get that lease you can do more for me," and he said, "What do you mean, do more. We don't do anything for anybody."

So they just didn't offer a thing. I could have got a better deal so far as cash was concerned, not a better price, but so far as different helps in fixing up my station, and equipment and so forth, from any other company, but I couldn't have got the sales helps to help me make my place successful. In my opinion I couldn't have got as good from any other company.

Mr. O'CONNELL. You referred a moment ago to stationery printed for you.

Mr. SCHUH. We pay for it.

Mr. O'CONNELL. So they offered you no inducement at all of the type you have been discussing?

Mr. SCHUH. No inducement whatsoever.

Mr. O'CONNELL. And other companies in the past had offered you inducements of one type or other, to which you had not succumbed?

Mr. SCHUH. The Shell Petroleum Co. had a salesman on my neck from 1 to 6 hours a day for 30 days and they wouldn't budge on price but they did offer me everything else they had in the book, and some that wasn't.

The CHAIRMAN. You must have a pretty good station.

Mr. SCHUH. I haven't a very good station, but at that particular time it meant a lot to be able to say, "We have signed up Schuh," because there was a fight between Barnsdall and Shell, and Shell had

bought out the former Barnsdall company or jobber, and Barnsdall had to start anew, and Shell wanted very much to take all of this jobber's business with them.

Mr. O'CONNELL. Whose company do you now buy from?

Mr. SCHUH. Mobilgas.

Mr. O'CONNELL. What company is that?

Mr. SCHUH. Wadham's.

Mr. O'CONNELL. Is that Mr. Arnott's company?

Mr. SCHUH. That is Mr. Arnott's company.

Mr. O'CONNELL. When did you change?

Mr. SCHUH. The 17th of August.

Mr. O'CONNELL. Of this year?

Mr. SCHUH. Of this year.

The CHAIRMAN. You were suggesting in response to one of my questions that you thought the Federal Government should give some aid to the refiners. Did you define the sort of aid you thought it ought to give?

Mr. SCHUH. I said in the form of a modified cartel that would enable a refiner in this industry to just——

The CHAIRMAN (interposing). You said in allowing them to form the modified cartel. That was your only suggestion?

Mr. SCHUH. Yes, sir. I would like to say this, that distressed gasoline to the petroleum industry is just as serious a problem as distressed corn is to a farmer, or distressed pork is to a farmer. It is the same thing, and distressed gasoline is what knocks prices down.

The CHAIRMAN. Of course, that suggestion is not at all new to any Member of Congress. The control of so-called surpluses has been suggested in numerous fields and denounced and praised on both sides.

Now you have offered proration of gasoline as well as proration of crude. Have you any other suggestions?

Mr. SCHUH. No; I don't.

The CHAIRMAN. What about marketing?

Mr. SCHUH. Excepting that we have a code. If this committee can do anything to encourage the Federal Trade Commission to give us a code that we can work under——

The CHAIRMAN (interposing). The purpose of a code would not be to fix prices but to prevent the unfair undercutting of prices, is that your idea?

Mr. SCHUH. That's right, to bring about open price posting.

The CHAIRMAN. You said something this morning about eliminating jobbers, I thought. Did I misunderstand you?

Mr. SCHUH. I never said anything about that.

The CHAIRMAN. I probably misunderstood you.

Reviewing your testimony this morning, which was an answer to certain allegations which were made to this committee by Mr. Hartley, of the Kansas City association, he testified with respect to some alleged conversations in which you participated, and you say, "The meeting was called at my suggestion, to discuss certain policies of the local association which I considered to be in violation of the bylaws of the national association and injurious to the best interests of retail oil dealers generally." What were those policies? That is the first sentence of the last paragraph on page 7.¹

¹ Of Mr. Schuh's prepared statement.

Mr. SCHUH. The question is, What were the policies?

The CHAIRMAN. The question is, What were those policies that you called this meeting to discuss?

Mr. SCHUH. We have a published statement of policy.

The CHAIRMAN. No, no; this doesn't deal with the published statement of policy. You refer here to certain policies of the local association.

Mr. SCHUH. The policies of the local association?

The CHAIRMAN. Which you consider to be a violation of the by-laws of your organization. Now, what were those policies?

Mr. SCHUH. One was complaining to various governmental agencies without first approaching us, giving us an opportunity to look it over, and if it was possible, such as in the New York case, instead of complaining to a governmental agency, they called it to our attention and we went to the refiners and corrected it.

The CHAIRMAN. You went on and said:

The bylaws specifically provided that all intra-industry complaints (price structure, marketing conditions, etc.) should first be presented to the national association for approval or for action before they were presented to the public or to the Government for legislation.

That was the policy of your association, was it?

Mr. SCHUH. Yes.

The CHAIRMAN. No member should make petition or complaint to any branch of the Government without first receiving your permission?

Mr. SCHUH. Without first notifying us.

The CHAIRMAN. Notifying and securing your approval; should first be presented to the national association for approval or for action.

Mr. SCHUH. Yes; that is true.

The CHAIRMAN. You think that is a wise policy for an organization to follow with respect to its Government?

Mr. SCHUH. Well, further on I say that where there is an obvious violation of law—I cover that—where there is an obvious violation of the law.

The CHAIRMAN. Well, I am trying to determine just what sort of complaint you feel should not be made.

Mr. SCHUH. Well, I might explain the whole thing this way.

The CHAIRMAN. Or is this just an indication of your belief that there ought to be a modified cartel and that the trade association should be authorized to exercise a certain amount of control over all its members so long as it wasn't violating the law?

Mr. SCHUH. Let me say this, that I don't believe in clothing any trade association with governmental authority.

The CHAIRMAN. I am not talking about governmental authority; I am talking about the sort of authority that you are evidently attempting to exercise, and I am trying to find out just what it is. I am trying to define it.

Mr. SCHUH. I think I can explain it this way, that if the Department of Justice or the Federal Trade Commission would get a complaint from us and we had established—

The CHAIRMAN (interposing). Now you are talking about something else. I am trying to determine why you passed this bylaw and what you have been doing under the bylaw, and what you think

that bylaw comprehends. Now this has nothing to do with the Federal Trade Commission because it was a prohibition against submitting anything to the Federal Trade Commission.

Mr. SCHUH. I just wanted to point out that if we investigated the complaint and found that it was perfectly legitimate and that there was some wrong being done here, and we put our weight behind it, the local group would go much further and get more action than by their complaint alone.

The CHAIRMAN. That isn't what you said. Now, is that what you mean?

Mr. SCHUH. That is our policy. Some dealers in Pennsylvania asked for an investigation; some dealers in Michigan asked for an investigation, and after a lot of running around for a couple of years nothing was accomplished, but a lot of enemies were made, and the industry was held up to ridicule because of some of the things that were brought out that weren't violations of laws, but they were made capital of by certain papers.

The CHAIRMAN. And your organization wants to exercise a supervisory power over the public acts and complaints of its members?

Mr. SCHUH. I wouldn't say that, excepting in an army the corporal obeys the sergeant and the sergeant obeys the captain. We have an organization and in organization there must be order, there must be a certain amount of order if an organization is to succeed. You can't possibly get any place with everybody going their own way and calling it an organization.

The CHAIRMAN. Now you mention here specifically price structure. Now what authority does your organization, under its bylaws, exercise over price structure, by its members?

Mr. SCHUH. None.

The CHAIRMAN. Then what did you put it in the statement for?

Mr. SCHUH. If there is a question of price structure and the dealers feel that they are paying too high a price and we can lend our weight to helping them get a lower price, I think that is a legitimate aim of the trade association.

The CHAIRMAN. Very well, but why would the association want to prohibit one of its members from making the complaint until the complaint was first submitted to the association and approved? Why wouldn't you come in afterwards and lend your approval and help?

Mr. SCHUH. The only way I can answer that is that the complaints that were made were obviously so foolish and without the slightest—and without being based on any facts.

The CHAIRMAN. So you wanted to set up, and you have set up, an organization which undertakes to pass judgment in the first instance upon the legitimacy of complaints that various members of your organization make?

Mr. SCHUH. After we have passed judgment. If we can't do anything for them or won't do anything for them, they are still free to take it any place they want. I would like to quote the rule. The rule of the national association was that they should come first to us and then if we couldn't help them—

Mr. BEEDY. He is reading from page 11, right in the middle of the page, Senator.

Mr. SCHUH (continuing). They were free to make their complaint elsewhere. In other words, we have never prevented a group from

making a complaint. We have urged caution upon them, to be sure that what they were complaining about was legitimate.

The CHAIRMAN. Now you were setting up a channel through which all complaints should flow, and they must come through the heads of your organization?

Mr. SCHUH. In order to help the dealers.

The CHAIRMAN. Well, that, of course, was your judgment as to what the purpose was. Now then, Mr. Hartley alleged that you threatened to revoke his charter. You denied that. You say:

I did not threaten to revoke the Kansas City Charter. Mr. Hartley knew, and everyone present at the meeting knew, that I had no authority to revoke the charter.

Then skipping a few sentences:

I did caution the group that violation of the bylaws was a cause for revocation of their charter, which would ultimately come before the Ways and Means Committee in due course.

Now, is that consistent with the statement on page 11, which your counsel has just called to your attention? It is on the top of page 9, "Violation of the bylaws." In other words, making a complaint without first submitting it is cause for revocation of a charter?

Mr. SCHUH. I think that is consistent.

The CHAIRMAN. May I ask you this question: Is there any danger that the charter of this Kansas City outfit will be revoked now?

Mr. SCHUH. They let it lapse.

The CHAIRMAN. They have no charter in your organization?

Mr. SCHUH. They have it, but they let it lapse.

The CHAIRMAN. I see.

There was just one other question that I wanted to ask you. Returning to your testimony this morning:

The National Association has a tough job on its hands trying to bring some order out of chaos in the highly disorganized retail field, a condition which has existed since the major oil companies withdrew and left the field wide open.

Am I to infer from that statement that you feel it was disadvantageous to the industry for the majors to withdraw?

Mr. SCHUH. No; there has been a certain amount of pressure from different associations throughout the country put on some of us to try to get us to admit that the Iowa plan has failed, and there have been reams printed about the failure of the Iowa plan, but I say that essentially the Iowa plan is sound marketing and merchandising, and in spite of the fact that we are still having a lot of trouble it doesn't mean that the plan has failed.

There is a lot of disorder, but when you have 380,000 or 415,000, or whatever it is, dealers, each one having to post his own price, and there is bound to be trouble and chaos.

The CHAIRMAN. You say here, or at least you seem to imply, that the withdrawal of the major companies disorganized the retail field.

Mr. SCHUH. It did.

The CHAIRMAN. Well, then, would it be proper to infer that you would like to see the major oil companies resume full control of their outlets rather than follow the lease plan?

Mr. SCHUH. No; absolutely not. I believe that we have got to come to a level, and I made a talk in Sheboygan a year ago warning the dealers throughout the country that we were headed for nar-

rower margins and we had to give the public a better price, a cheaper price, and take less for ourselves, and instead of depending on gasoline for our living, that we had to sell other products and merchandise and services in order to make our stations pay, so that we could operate on a smaller margin and give the public a better price and be more competitive.

The CHAIRMAN. Is the position of the independent retailer improving or becoming more difficult?

Mr. SCHUH. I would say that in the majority of cases, the wide-awake independent dealer today is better off now, much better off now than he was 5 or 6 years ago.

The CHAIRMAN. Judge Sumners, you wanted to ask some questions.

The VICE CHAIRMAN. Yes; I want to ask you a few questions on a different phase of the matter. I understood your testimony a moment ago to be to the effect that it is necessary to continue the independent refining business if you are to continue the independent retailer in business.

Mr. SCHUH. That is right.

The VICE CHAIRMAN. The independent refiner selling merchandise that doesn't have an established reputation—how does he do it if he can't sell to the major companies at less price?

Mr. SCHUH. Sell at a lesser price, I mean supply the cut-raters, and I say the cut-rater has a place in this picture, that is the fellow who sells at a lower price, as long as he doesn't try to get all the business.

The VICE CHAIRMAN. Now, a small manufacturer who produces just as good a quality of gasoline as a big manufacturer has no way, does he, speaking practically, of letting the public know that he, this particular manufacturer, is producing a high-grade gasoline?

Mr. SCHUH. Yes; there are any number of refiners such as you describe who don't prefer to have their own distribution system, and therefore sell to jobbers who sell either under their own brand or under that refiner's brand, I mean small companies, and they are doing a marvelous job of merchandising.

The best example is the Pate Oil Co., of Milwaukee, who entered the business in 1933 in the depth of the depression.

The VICE CHAIRMAN. Are they refiners?

Mr. SCHUH. No; they are a jobber, handling some of Anderson-Prichard's materials, and Pate today in 5 or 6 years has some of the nicest stations in Milwaukee and is selling a good volume of gasoline.

The VICE CHAIRMAN. He sells it as Pate?

Mr. SCHUH. He sells it as Pate for this Anderson-Prichard refinery.

The VICE CHAIRMAN. Now, the person going down the road who wants to get some gasoline, there is some place he wants to go and he wants to be pretty sure he gets there, ordinarily would he buy gasoline unless he knew its quality? I think we had better put it this way: Would he buy gasoline except gasoline that is sold under a trade name that is known to him and which is believed by him to be a good gasoline?

Mr. SCHUH. I think I can answer that this way. If you came to Milwaukee and drove down the street and saw a Pate station, you probably wouldn't go there, but living in Milwaukee and knowing the Pate Co. and listening to their radio program on the air, a local

program, I, if I wasn't in the business, wouldn't hesitate to buy from Pate because by reputation he has established a good name.

The VICE CHAIRMAN. Is it possible for any agency to prescribe the essential elements of quality which makes a material a good gasoline and see to it that whoever does produce that gasoline of that quality shall have something to indicate that he does have that sort of gasoline, and which would inspire confidence in the general public to buy? Is my question too involved?

Mr. SCHUH. No, no; it has been tried. It has been tried in both South Carolina and Utah. I don't believe that it is very successful.

The VICE CHAIRMAN. Is it because of a lack of confidence in the agency of inspection and supervision?

Mr. SCHUH. I think a lot would depend on that. I entered one of these testing laboratories and one of the most delicate machines that are manufactured by the Waukesha Motor Co. to test gasoline was in the same room they were testing concrete in, and the jar and the jolt—I don't see how they would get an accurate reading off this thing.

The VICE CHAIRMAN. Your criticism is with reference to the mechanics of the thing, with reference to how they proceeded about it?

Mr. SCHUH. Theoretically, I think it is a good idea.

The VICE CHAIRMAN. But it hasn't been worked out practically.

Mr. SCHUH. We introduced a bill in Wisconsin in 1933 or '34 to establish grading, and withdrew it because we couldn't find any way of ascertaining or making certain that the agency set up to grade would have the proper information to go on. Since that has been developed a little bit, it may be in 10 years we will have the Federal Government sending out a set of specifications and material for State laboratories to go on. Maybe that is coming. It looks to me like a good idea but practically it hasn't worked out to my satisfaction.

The VICE CHAIRMAN. So you don't think in dealing with this general problem there is much to be expected from that source?

Mr. SCHUH. I would say, Mr. Congressman, that because inspections will show that each company is vying with the other to put out a better brand of gasoline, they are doing the best job of grading that I know of. Everyone is trying to get a better gasoline so they can say Socony is better than Esso, and Shell is better than Socony, and—

The VICE CHAIRMAN (interposing). That leaves the little man out of the picture. How can he do that, as a practical proposition? How can a small manufacturer do that?

Mr. SCHUH. I saw a sample of gasoline taken out of the new Illinois field and the specifications pretty nearly knocked me off the chair. Here was just a small refiner, I think he almost had what we call a tea-kettle refinery, turning out some A No. 1 gasoline.

The VICE CHAIRMAN. How does the man going down the road by his place, coming from California, know that is a good gasoline to put in his car when he wants to come to Washington?

Mr. SCHUH. He can determine that by the establishment that sells it, by the appearance of the establishment that sells it.

The VICE CHAIRMAN. How would a man coming from California know by looking at the station that that is the place where he could get good gasoline? All he knows is, his wife says, "There's a gasoline station, let's stop and get some."

Mr. SCHUH. If he has an attractive looking place and is attempting to do everything to satisfy the tourist and do a good job, he would naturally have good gasoline or lose what business he has.

The VICE CHAIRMAN. Not if he caught every sucker that came down the road.

Mr. SCHUH. You can't, because if you come into my place and buy good gasoline and you drive on for 10 blocks you know whether you got good gasoline, and if you didn't, you will never stop at Schuh's again.

The VICE CHAIRMAN. I have understood in my State, whether it is true or not, that some of the small manufacturers in East Texas have made a pretty good gasoline but it is always classified as East Texas gasoline, and if that goes into general consumption it has to clear through one of the major companies that have an established market.

Mr. SCHUH. No; I am somewhat familiar with that.

The VICE CHAIRMAN. I imagine you are and that is why I am asking you these questions.

Mr. SCHUH. I have encouraged the East Texas refiners, in order to get a better price for their product, to sell it under one brand name, and many of them are now doing that under the Dixie brand. I know many of those people there, and that has been a serious problem because of the inability to get a reasonable price for that merchandise.

The VICE CHAIRMAN. You think that that holds some hope for those independent refiners?

Mr. SCHUH. The Dixie Jobber, Inc., which is a wide organization—and I have always admired them—are doing a splendid job.

The VICE CHAIRMAN. I don't think we had better go any further. It is getting pretty late.

Dr. LUBIN. I would like to ask just a question. I take it from your statement, Mr. Schuh, that so far as you are concerned, you feel that competition in the disposition of gasoline should be based primarily on quality, and that the man who puts out the better brands will get the business away from somebody else and that there is competition in the industry to force improvement of product.

Mr. SCHUH. There is a stiff race for quality.

Dr. LUBIN. Did you ever hear of the exchange of gasoline between major companies?

Mr. SCHUH. Yes.

Dr. LUBIN. What advantage, then, is this quality business if there is exchange of gasoline sold under different brands at different pumps and the product being identical?

Mr. SCHUH. I am not familiar with any particular exchanges. I know that in certain instances I have heard of where it is reprocessed. Otherwise it is made to specification, which is very often done. My company—that is, the company whose product I sell—buys a great deal of third-grade—at least they used to—and they have a superior third-grade because their specifications that they issue to the company making it for them compel it to be a superior grade.

Dr. LUBIN. But have you ever heard of company A gas being sold in company B tanks?

Mr. SCHUH. Not in just that way.

Dr. LUBIN. You never have heard of that being done? The reason I raise that question is that the president of one of the large oil companies, which has a very large refinery, told us that this question of advertising qualities is somewhat exaggerated, that as a matter of fact the same gas may not be good for two cars produced by the identical producer in the same year, that there are such tremendous variations in cars and in motors that it is absurd to say that brand A is the kind of gas that you need for your car. That, from an expert in the industry, a refiner himself, contradicts your statement relative to the competitive situation so far as the retail dealers are concerned.

Mr. SCHUH. Well, I certainly don't want to contradict him, but I can't feel that I should push my product feeling that it is merely as good as somebody else's. That isn't salesmanship.

Dr. LUBIN. In other words, as far as the consumer is concerned there is little difference what he gets, it is a question of salesmanship.

Mr. SCHUH. I think a great deal. In my heart I honestly feel that the gasoline I sell is better.

Dr. LUBIN. I would like to ask one further question which bears upon the question asked you by the chairman. If I went into the business or if I were in the refining business and wanted to develop a market, and decided to set aside \$100,000 this year to expand my market, and decided to do it by making additions to stations, potential distributors, and you were in the same business, but you decided that you wanted to expand your business but you wouldn't do it that way, you would spend that \$100,000 on sales talks and advertising and post cards, is one less fair than the other, in terms of fair competition?

Mr. SCHUH. I think one is less fair than the other because when you loan me money to improve my station you tie me up hand and foot and I can't quit you when I want to.

Dr. LUBIN. Let's assume I give you free services instead of loaning you money.

Mr. SCHUH. Well, within reason I don't believe—for instance, if you said, "Well, I will supply you a man to comb this neighborhood for you and call on customers to come to buy from you," I don't think that would be any more unfair than the other company holding sales meetings and clinics and so forth.

Dr. LUBIN. Well, let's assume that I said, "I will put these new tanks in for you under very reasonable conditions," new pumps, rather, is that less fair?

Mr. SCHUH. Well, those reasonable conditions might bind sooner or later. There is a tendency to tie the dealer up, and the minute that you tie a dealer up you start to restrict competition, and when you start to restrict competition the tendency is then to retract and have a dealer tied up and give him nothing.

Dr. LUBIN. Then the unfair part is not furnishing the services but, having furnished them, taking advantage of them.

Mr. SCHUH. I think it is a chain.

Dr. LUBIN. Well, I am trying to figure out what you mean by fair competition. Apparently if I spend my money one way on my dealers it is fair and if I spend it another way, assuming that I am equally straight and I have no intention or desire to tie them up, why is it less fair to do it that way than it is your way? You are

against price competition, you are against service competition. I am trying to find out what kind of competition you are for.

MR. SCHUH. I am not against price competition, excepting that it should be in the open; it should be right out where everybody could see it. I can make a deal in Milwaukee with one of the jobbers and get a half a cent better than I am getting now; and if I am very sharp and a good chiseler, I could get some more, and that is prevailing all the time; but as long as he does it openly, I don't find anything wrong with it, because the other fellow will meet it.

MR. O'CONNELL. You mean you have no objection to price cutting by retail outlet or jobbers so long as it is according to a posted price.

MR. SCHUH. That is right.

MR. O'CONNELL. You mean that a price cutter is not a price cutter in your view so long as he does it openly?

MR. SCHUH. Excepting as we term—it is a term to me. It really doesn't mean what it says. I should use the term "unbranded"—who always cut the price.

MR. O'CONNELL. Is that all right?

MR. SCHUH. It is all right. They have a place in the picture. The independent refiner has to sell his merchandise, and as long as he is within reason and doesn't try to take all the business.

MR. O'CONNELL. That is what I want to understand. When does he stop being within reason? I take it a person who would cut prices or undersell you or another dealer would be doing it for the purpose of getting more of the business. When should he stop? Are you entitled to a share of the business?

MR. SCHUH. I have got to fight for it.

MR. O'CONNELL. I know; that is right.

MR. SCHUH. And as long as I can hold mine against a fair price, all right.

MR. O'CONNELL. When does he become unfair? When does it become unfair for him to compete on a price basis? You say so long as he doesn't take too much of the business.

MR. SCHUH. Let's get practical. The Clarke Oil Co. in Milwaukee since 1931 has come from nowhere, one little station, to third position by cutting price. He is the third largest distributor in the city of Milwaukee. He will push Standard and Socony-Vacuum off that pedestal if they don't look out. I think, obviously, the fellow is foolish, because he is just trying to get too much business.

DR. LUBIN. Apparently he is making money by the deal; he is building stations.

MR. SCHUH. Yes; he is making money.

DR. LUBIN. What is unfair about it?

MR. SCHUH. Sooner or later some place he is going to trip and fall.

DR. LUBIN. That is going to be his hard luck; but in terms of fair competition, what is unfair about it?

MR. SCHUH. In every instance he built a station kitty-corner to two or three established stations, and he cut the price until some of those fellows have gone bankrupt. When you cause that, I think that isn't clean competition.

DR. LUBIN. In other words, you think that nobody should charge less than enough to keep everybody in business.

MR. SCHUH. No.

DR. LUBIN. Where do we draw the line?

Mr. SCHUH. A fair price.

Dr. LUBIN. Apparently his price is fair; he is making good profits.

Mr. SCHUH. No; it is only fair because he has been able to grab the volume by adopting the methods that I describe.

Dr. LUBIN. What is the function of business, of the businessman? It is to increase his output and increase his volume, isn't it, and if you can do it cheaper than the other fellow and still do it at a profit so that you are not taking unfair advantage of the other fellow in the sense that you make it impossible for him to make a profit because you are willing to forego a profit, what is unfair about it? Isn't that the essential of a modern business scheme? Isn't that the essential of a competitive system and private enterprise? Are you advocating we change our whole competitive system and eliminate it?

Mr. SCHUH. No.

Dr. LUBIN. What would you substitute for it?

Mr. SCHUH. I wouldn't substitute anything for it, but in this particular instance, if the companies had given us a competitive price, that is, had given us a price that we could pay, this man wouldn't have made the progress that he has made.

Dr. LUBIN. Couldn't you have gone out and done the same thing he did?

Mr. SCHUH. Yes.

Dr. LUBIN. What is unfair about this?

Mr. SCHUH. Because I don't think, in my opinion, that it is fair.

Dr. LUBIN. What is unfair? What is your criterion of unfairness? What is your test?

Mr. SCHUH. My criterion of fairness is to be reasonable and not to take advantage of your fellow businessman.

Dr. LUBIN. In other words, you are unreasonable if you want to make a profit.

Mr. SCHUH. No. I think you are entitled to a profit.

Dr. LUBIN. You are unreasonable if you are unwilling to make the maximum profit.

Mr. SCHUH. No.

Dr. LUBIN. Then what is your test of reasonableness?

Mr. SCHUH. Your test of reasonableness is being fair about the prices that you establish.

Dr. LUBIN. What is the test of fairness?

Mr. SCHUH. Well, in many cases they stay a cent below us.

Dr. LUBIN. But what is unfair about staying a cent below you if he can sell the product a cent cheaper than you can and still make money in the process?

Mr. SCHUH. They claim that they are entitled to a differential because they haven't an advertised product. Let me say this. This whole question has been argued and reargued both by the Petroleum Administrative Board and by the code committee, and Mr. Ickes finally decided that they are entitled to a half a cent.

Mr. O'CONNELL. Obviously the whole problem is far from being solved, but you have suggested, or at least you have taken a position, and it is to my mind a little bit difficult to be very realistic and take the sort of position you have taken. I mean, what is reasonable and what is a fair price? That has very little to do with the competitive system.

The CHAIRMAN. Don't cut the prices so far as to drive anybody out of business. Now that is what you are driving at, isn't it?

Mr. SCHUH. Not quite. I think somebody should be driven out of business, and that is the type of fellow that sits on his seat and is too lazy to work.

The CHAIRMAN. But you would have somebody in charge of a modified cartel who would decide which ones would be driven out, and which ones would not?

Mr. SCHUH. I don't believe in that.

Dr. LUBIN. May I ask a final question? You were president of this association for how many years?

Mr. SCHUH. From 1934 until September of this year.

Dr. LUBIN. What salary did you receive as president?

Mr. SCHUH. Nothing up until January 1, 1938, and from January 1, 1938, until—there is an argument as to whether I am going to get paid for the last 2 months—I received enough to replace a man at my station, or \$100 a month.

Dr. LUBIN. Did you have a travel account, expense account to travel on?

Mr. SCHUH. No; no definite account.

Dr. LUBIN. You just traveled at the expense of the Association?

Mr. SCHUH. Of the Association. I would like to add to clear this thing up that I am definitely on record urging the dealers to keep their prices low enough to be competitive. That they had to recognize this competition that I was telling you about, and come as close to it as they possibly could.

Dr. LUBIN. How can you be competitive without taking business away from the other fellow?

Mr. SCHUH. Well, we always lose business; we always gain business.

Dr. LUBIN. Certainly, but if I didn't go into business you would lose less, wouldn't you. Because I came in and became a competitor I either took some existing business away from you or limited the possibility of your getting more business as it expanded. That is the function of the competitive system?

Mr. SCHUH. That is right. I would like to say this, that strictly speaking, under the competitive system your rugged individualist, and I don't claim to be a rugged individualist—

Dr. LUBIN (interposing). He has been dead for years.

Mr. SCHUH. No; I don't believe so; I have seen him in operation since.

The CHAIRMAN. Let me call the attention of members of the committee to the hands of the clock.

Mr. SHAUGHNESSY. I think I know what Mr. Schuh means by unfair.

The CHAIRMAN. Proceed; let us have it; that would be illuminating.

Mr. SHAUGHNESSY. This unbranded price-cutter, you don't dare meet him because all the other branded distributors or dealers will come down to meet you, so you are in a position where your hands are tied, unless you tolerate him?

Mr. SCHUH. That is right.

Mr. SHAUGHNESSY. O. K.

Mr. Cox. May I ask one question?

The CHAIRMAN. Yes, indeed, Mr. Cox.

Mr. Cox. Am I to understand from your statement this morning, Mr. Schuh, that you regard the bylaws of your association as violated if the member gives voluntary information to the Department of Justice or some other governmental agency without first consulting the national organization?

Mr. SCHUH. That question is so general that I would have to qualify it.

Mr. Cox. Well, look at page 11 of your statement, the item 5 there says "Cease giving voluntary information to the Department of Justice," and you say—

As I have already stated, I indicated that if they wanted to complain to the Department of Justice or to anyone else as to problems arising in Kansas City, the rule of the national association was that they should come first to us and then if we couldn't help them, they were free to make their complaint elsewhere.

Mr. SCHUH. Well, that was merely to prevent a lot of half-baked stuff coming up to the Department of Justice.

Mr. Cox. Well, does your bylaw recognize any distinction between a complaint to the Department and merely giving voluntary information to the Department on the Department's request?

Mr. SCHUH. If the department requested information, by all means it should be given. There has never in our association's history—have we ever thought of turning down information requested or help that was requested.

Mr. Cox. Is it all right for a local organization to give it?

Mr. SCHUH. Yes, anybody; that is perfectly all right.

Mr. Cox. So you didn't mean here that it was any violation of the bylaws when volunteer information was given in response to a request by the department?

Mr. SCHUH. That is right, but where it was volunteered and in this particular instance they didn't know what they were talking about, we thought it was asinine to bother.

Mr. Cox. Now one more question. I suppose it is your opinion that the tank-wagon price in Kansas City is a competitive price, is it, Mr. Schuh?

Mr. SCHUH. Well, no.

Mr. Cox. You think it is not a competitive price?

Mr. SCHUH. It is not a competitive price.

Mr. Cox. You mean by prices fixed by someone?

Mr. SCHUH. No; it is not a low enough price.

Mr. Cox. Well, what I am asking specifically is this, do you think any one person or any combination of persons fixes that tank-wagon price?

Mr. SCHUH. No.

Mr. Cox. Is it controlled by economic forces?

Mr. SCHUH. Yes.

Mr. Cox. Then why did you suggest that the reason you wanted the Kansas City Association to stop accusing the major oil companies of monopolistic practice was because if they didn't stop they couldn't expect any reduction from the major oil companies in tank-wagon prices?

Mr. SCHUH. Well, because of the situations arising in the oil fields and, as I say, the vicious price competition that the dealers had; the companies sat by and let these poor dealers go with the high tank-

wagon price, expecting them to live and meet a competitive situation that the companies should have recognized.

Mr. Cox. Was it your opinion that the major companies could control their tank-wagon price in any way?

Mr. SCHUH. Well, if the Socony-Vacuum is charging me too much money and I go down to point out to them I have got to have a lower price and they reduce it, they are an appreciable factor in the market and the other companies have got to follow.

Mr. Cox. In that event, then, it wouldn't really make any difference whether they stopped accusing the major oil companies of being monopolistic, if that tank price operated that way in response to competitive conditions they could get it anyway.

Mr. SCHUH. Most dealers were afraid to approach the suppliers because of what the association was doing.

Mr. Cox. You mean these harsh words they were speaking didn't scare the majors but they scared the other retailers.

Mr. SCHUH. Many of them were concerned about it.

The CHAIRMAN. There are no other questions?

Mr. Schuh, you may step aside. The committee has finished with your examination.

The Chair will announce that there are three additional sessions, as it were, of this committee. Tomorrow afternoon at 2:15 the committee will hear some representatives of the National Resources Planning Board. This was at the request of the representatives of the Department of Commerce. On Friday morning at 10:15 we shall begin the testimony of Mr. Del Sesto. The committee will then recess over the week end and on Monday Mr. Farish, president of the Standard Oil of New Jersey will be the witness, provided we finish our examinations.

The committee is now in recess until 2:15 tomorrow.

(Whereupon at 5:40 p. m. the committee recessed until 2:15 p. m. Thursday, October 19, 1939.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

THURSDAY, OCTOBER 19, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE.

Washington, D. C.

The committee met at 2:25 p. m., pursuant to adjournment on Wednesday, October 18, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman); Representative Sumners (vice chairman); Senator King; Representative Williams; Messrs. O'Connell, Henderson, and Brackett.

Present also: Clarence Avildsen and Robert McConnell, representing the Department of Commerce; Quinn Shaughnessy, representing the Securities and Exchange Commission; Representative Mapes (Michigan); W. B. Watson Snyder, F. E. Berquist, Hugh Cox, Christopher Del Sesto, special assistants to the Attorney General; Roy C. Cook and Leo Finn, Department of Justice.

The CHAIRMAN. The committee will please come to order.

During the testimony several days ago of Mr. Orvis¹ there was presented a letter from M. H. Champion, president of the Petroleum Rail Shippers Association. This was one of numerous communications which the committee felt should not be admitted to the record until authenticated by some person who had either written or received it.

The committee is now in receipt of an authentication of this letter, transmitted by Mr. Champion to Secretary Brackett. Without objection, therefore, the original letter and the letter of authentication, together with the affidavit of Mr. Champion, will be received for the record.

(The letter and authentication referred to were marked "Exhibit No. 1309" and are included in Hearings, Part 16, appendix, p. 9368.)

The CHAIRMAN. This afternoon the committee is to hear a presentation on behalf of the National Resources Planning Board, with Mr. Watkins speaking first. It has been our custom to swear the witnesses. Do you and each of you solemnly swear the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

¹ Eugene Orvis, attorney, Jersey City, N. J., whose testimony on transportation practices in the industry appears in Hearings, Parts 15 and 16.

TESTIMONY OF HERMAN STABLER, CHIEF OF THE CONSERVATION BRANCH, UNITED STATES GEOLOGICAL SURVEY; HALE B. SOYSTER, CHIEF OF THE OIL AND GAS LEASING DIVISION OF THE CONSERVATION BRANCH, UNITED STATES GEOLOGICAL SURVEY; ROSCOE A. CATTELL, CHIEF ENGINEER, PETROLEUM AND NATURAL GAS DIVISION OF THE TECHNOLOGIC BRANCH, UNITED STATES BUREAU OF MINES; RALPH J. WATKINS, ECONOMIC ADVISER, NATIONAL RESOURCES PLANNING BOARD; AND GLENN E. McLAUGHLIN, ASSISTANT PROFESSOR OF ECONOMICS, HUNTER COLLEGE, NEW YORK CITY

Mr. WATKINS. I do.

Mr. McLAUGHLIN. I do.

Mr. CATTELL. I do.

Mr. STABLER. I do.

The CHAIRMAN. You may proceed, Mr. Watkins.

Mr. WATKINS. Is it customary, Mr. Chairman, to identify one's self?

The CHAIRMAN. Oh, yes.

Mr. WATKINS. My name is Ralph J. Watkins. I am economic adviser on the staff of the National Resources Planning Board. I directed for the National Resources Committee last year the study which has recently been published as House Document No. 160, under the title "Energy Resources and National Policy," a study which was concerned with conservation and wise use of the Nation's energy resources—coal, oil, gas, and water power primarily.

I am an economist by training and a research director by experience. I am a graduate of the University of Texas. I did my graduate work at Columbia University thereafter, and for the past 10 years or so I have been engaged in the direction of economic research, and I have just mentioned a little while ago my direction of the study of the National Resources Committee, which, as you know, is now the National Resources Planning Board.

Mr. HENDERSON. You directed the two-volume study of the iron and steel industry, also, did you not?

Mr. WATKINS. Yes; I also directed—while at the University of Pittsburgh as director of the Bureau of Business Research there—the two-volume, or, rather, I should say, a study of the economics of the iron and steel industry, which was published in two volumes in 1937 under that title.

At the outset, Mr. Chairman, I wish to say that I am appearing here at the request of the Department of Commerce transmitted through Mr. Robert E. McConnell, who, I believe, is sitting with the committee. Several weeks ago a report of the National Resources Committee was published under the title Energy Resources and National Policy, House Document No. 160, Seventy-sixth Congress, first session. This study was made at the request of the President, and its purpose was concerned with the public interest in the conservation or wise use of the Nation's energy resources, chiefly coal, oil, natural gas, and water power. This study was conducted during 1938, under my direction. Because of the bearing of certain parts of that report on the present petroleum investigation by the Temporary National Economic Committee the Department of Commerce through Mr. McConnell re-

quested the National Resources Planning Board to have me organize a brief presentation to this committee on waste and conservation in the petroleum industry, in relation to the subject of this inquiry.

It has seemed best to have this subject discussed by a petroleum engineer, by an economist, and by a representative of the Geological Survey.

Accordingly, I have arranged to have the economic aspects discussed by Mr. Glenn E. McLaughlin, who is now assistant professor of economics, Hunter College, of the city of New York. Mr. McLaughlin prepared the chapters on economic analysis of the oil and gas industries, in the energy resources study to which reference has been made. Through the cooperation of the Secretary of the Interior, Mr. R. A. Cattell, chief engineer, Petroleum and Natural Gas Division, Bureau of Mines, will discuss the engineering aspects of waste and conservation in the industry.

I may say that Mr. Cattell will follow me; Mr. McLaughlin will then come third.

Mr. Cattell is joint author of the chapter on Phases of Technology in the Petroleum Industry in the Energy Resources Study. Likewise, through the cooperation of the Secretary of the Interior, Mr. Herman Stabler, chief of the conservation branch, United States Geological Survey, will discuss the conservation of petroleum on the public domain and the Indian lands. And, Mr. Chairman, in justice to my associates in this undertaking and in justice to myself, I think it ought to be said that this presentation is very much of a rush order. We had yesterday and this morning to prepare this testimony, and I hope you will bear with us if it seems to be lacking in some of the earmarks of the ordinary scholarly presentation.

Senator KING. I think we should prefer more of a factual presentation, perhaps, than a highly scholarly one.

Mr. WATKINS. I might say we have not followed the usual process of documenting every statement that we have made in this testimony, but in general the factual statements which I make and the factual statements which Mr. McLaughlin makes are taken from the cited Energy Resources Study; the statements which Mr. Cattell will make come from various publications of the Bureau of Mines which he has prepared.

It will, I think, be apparent to the Temporary National Economic Committee as the testimony proceeds that these problems of waste and conservation are intimately related to the subject of your inquiry into the economic organization of the petroleum industry. In fact, it may be stated that these problems inhere in the industry's economic organization. In turn, this economic organization of the industry has its necessary setting within the framework of certain legal principles and institutions, including the rule of capture. No individual oil company, nor any group of oil companies, can be blamed for the major waste that obtains in this industry. Rather, it must be said that the problem is much more deep-seated and that it will yield to a solution only as changes are made in the industry's economic and legal pattern.

My own remarks will be limited to a brief statement on the public interest in conservation in the petroleum industry, and I may say, Mr. Chairman, that my statement will run to about 10 to 12 minutes

and each of the remaining three speakers will take about 30 minutes, if that is your pleasure.

The CHAIRMAN. That is quite all right.

CONSERVATION OF OIL AND GAS POOLS

Mr. WATKINS. Let me say first of all that it was the judgment of the National Resources Committee that conservation in this industry means scientific management of oil and gas pools. The committee noted that in many States the courts have already modified the rule of capture so that a landowner can recover only a certain amount of oil within a given period.

(Representative Sumners assumed the Chair.)

Mr. WATKINS. Although the right of capture has been modified somewhat, it needs, in the words of the committee, to be completely displaced by a thoroughgoing law of ownership in place, which would allot to each producer that proportion of the oil and gas in the common reservoir which underlies the land he owns or controls. The committee concluded that the economic advantages of unit operation and scientific management of oil and gas pools are so overwhelming and so generally approved by technicians that some legal device of providing for their adoption and enforcement will surely be forthcoming as the threat of exhaustion becomes imminent. It should be made clear at this stage that conservation of petroleum does not mean abstinence from use, or hoarding. Rather, conservation means wise use; that is, the efficient use of our petroleum resources in the interest of the national welfare, the avoidance of unnecessary waste in production and utilization, and the safeguarding in economic health of the industries and populations on which we rely for the development of this vital resource.

It has been brought out in this investigation of the Temporary National Economic Committee that proven reserves of petroleum in natural reservoirs have been estimated recently at somewhat more than 17 billion barrels, in comparison with 1938 production of approximately $1\frac{1}{4}$ billion barrels.

Senator KING. Was there any prophecy made, or any guess made as to the unproven fields and the possibility of production there and the amount of production?

Mr. WATKINS. I do not know of any, which should receive the attention of the committee.

Likewise, that cumulative production through 1938 has amounted to 21 billion barrels. To secure that production of oil, almost 1 million oil wells have been drilled in the United States, of which about 360,000 are now producing. Your committee has heard various estimates of the loss of capital represented by the excessive drilling of oil wells and likewise estimates of the loss of irreplaceable natural resources through dissipation of reservoir energy and through various wasteful methods of production which have resulted in a lower percentage of recovery of petroleum deposits than could be obtained by application of the best engineering methods. I am not in position to estimate the full extent of such losses and wastes, but it appears from the testimony you have already heard and from that which you will hear at this session that the amount is sufficiently high to challenge the best efforts at prevention by both the industry and State and National agencies.

For example, I understand that one of your witnesses has estimated that 21,000 out of the first 24,000 wells drilled in the East Texas field were unnecessary and resulted in a capital loss of 300 million dollars. If, however, we assume that only half of the 60,000 wells drilled in the United States during 1937-38 were excess wells, then we secure an estimated loss of capital of \$300,000,000 a year, calculating the cost of an average well at \$20,000. No allowance is made here for the loss of operating and maintenance costs on these assumed excess wells. To continue with this series of assumptions—if we assume that the general or universal application of the best engineering methods would raise the ultimate recovery percentage by one-half (e. g. from 30 to 45 percent), then at the 1937-38 production level of somewhat more than 1,200 million barrels a year the ultimate saving would amount to about 600 million barrels. The discount to secure present value of this saving to be realized in the future might well be offset by the increased value of this resource as the rate of depletion advances. If so, may we value this hypothetical saving at around 600 millions of dollars. It is at least suggestive and provocative to raise these questions. If these assumptions are reasonable—and it must be emphasized again that they are assumptions resting largely on conjecture—they suggest a waste annually of perhaps a billion dollars. If the actual waste is only one-half of that figure, the problem is a grave one. Even if the actual waste is only one-tenth of a billion—and I do not believe anyone would place it so low—there is still a serious problem. And let me say that if we must assess blame for this waste, then logic requires that we blame it on ourselves collectively; that is, on government, including the courts, since government is responsible for the legal framework within which the industry's economic organization must perforce find its setting.

From the evidence reviewed in the study by the National Resources Committee, it appeared beyond argument to the committee that the Nation's patrimony in petroleum resources should be safeguarded, that a sound national policy must be concerned with the wise use of this resource. The committee likewise took that position with respect to coal, oil, natural gas, and water power. And it may be of some interest to note that the committee recommended that conservation or wise use of coal should be promoted even though the reserves of coal have been estimated at more than 2,500 billion net tons of equivalent bituminous coal, in comparison with petroleum in proven natural reservoirs amounting to the equivalent of only 4 billion net tons of bituminous coal and natural gas reserves of similar equivalence of about 4 billion net tons of bituminous coal. The dependence of our civilization on low-cost liquid fuels and lubricants is so great that we simply cannot afford not to concern ourselves with the wise use of this resource. The committee pointed out that the rank of petroleum as a source of energy, its vital importance in national defense, its vulnerability to wasteful forces in exploitation, and its comparatively small reserve in relation to the high rate of withdrawal, place this commodity in a unique position among the natural resources.

It was noted by the committee that the interest of the public in petroleum revolves around the central problem of maintaining an adequate supply at a reasonable price as long as possible. The Na-

tional Resources Committee's recommendations with respect to petroleum were made in accordance with that public interest. Thus, the committee recommended that the Federal Government should cooperate with the oil-producing States and the petroleum industry in the establishment of minimum standards for production designed to prevent waste and assure wise use of this unique resource. It was reiterated by the committee that the purpose of such standards should be to secure the benefits of a continuous stream of reasonably priced liquid fuels for as long a period as possible for the national defense, for the people as a whole, and for all the States both oil producing and nonoil producing. The committee felt that the change from the present system does not need to be drastic, although more uniformity and better coordination are imperative. It was recognized also that the development of minimum standards for the production of oil and gas designed to further the wise use of these resources is a complex problem; and that it would be a time-consuming process which would call for cooperation with State regulatory agencies and with the representatives of the industry.

It is believed that we are depleting our reserves of oil faster than the rest of the world. Available evidence shows that we have accounted for about 60 percent of the cumulative production of petroleum in the world, whereas our reserves amount to about 50 percent of proven world reserves. Moreover, it is probably true that our resources have been more adequately explored than have those of many other oil-producing regions. Consequently, we must consider the possibility of being first among the oil-producing nations to feel the pinch of approaching depletion. It is, of course, true that, after our natural reservoir oil is exhausted or after the shortage becomes serious, we can turn to oil produced from coal, to oil-bearing rock or shale, or to a limited extent to alcohol from vegetable matter. But liquid fuel is available from these processes only at much higher costs. Consequently, although we need not be alarmed over the possible break-down of our motorized civilization, we may well concern ourselves over the higher costs that we should have to pay after exhaustion of our natural reservoir oil. The protection of that resource, the elimination of avoidable waste, and the assurance of wise use of that unique resource are tasks worthy of the best cooperative efforts of the petroleum industry, the oil-producing States, and the Federal Government. It seemed clear to the National Resources Committee in its Energy Resources Study that grave waste of this irreplaceable resource will not long be tolerated by an intelligent society.

The VICE CHAIRMAN. Thank you very much, Doctor. Now I wonder in the testimony that is to be given by the gentlemen who will follow you if they will discuss ways and means to any considerable degree. I hope they will, as one member of the committee.

We, of the committee, know pretty generally that there are too many oil wells, and we know pretty generally that there is leakage flow from one part of a field to the other, and we know gas is being dissipated in the air. We know all that. Now what we want to do is to get some usable information as to ways and means—I do as one member of the committee, and I think my colleagues with me.

Mr. WATKINS. The next witness, Mr. Cattell, of the Bureau of Mines, will discuss the engineering prospects of this problem of ways

and means of conservation. The third witness, Mr. McLaughlin, will discuss the economic aspects in which he will take up specific measures and discuss such things as unit operation; so will Mr. Cattell, I might add. And finally, Mr. Stabler will discuss ways and means that have actually been employed and are being employed on the public domain, so I think we will get down to cases.

The VICE CHAIRMAN. Thank you very much.

(Senator O'Mahoney resumed the Chair.)

The CHAIRMAN. And Mr. Cattell is the next witness?

Mr. CATTELL. R. A. Cattell, chief engineer, Petroleum and Natural Gas Division, Bureau of Mines.

Dr. Watkins has told you of the short notice we had for the preparation of this material. We didn't know about this hearing until Tuesday evening. Yesterday afternoon I was asked to include material on unit operation. Members of my office gathered some material together in a short time.

The statement I have prepared is too long because there wasn't time to make it shorter. With your permission as I go through it, I shall omit certain parts. Those parts will be available for the record if they are desired.

The CHAIRMAN. That will be quite all right. If you desire, we will print the omitted parts in the record.

Mr. CATTELL. I have given a copy of the statement, as prepared, to the stenographer.

(Mr. Cattell's prepared statement was marked "Exhibit No. 1310" and is included in the appendix on p. 9850.)

ENGINEERING ASPECTS OF CONSERVATION

Mr. CATTELL. Conservation is a word that brings forth diverse views. The word means different things to different men. However, few will disagree with the statement of Joseph A. Holmes, the first director of the Bureau of Mines, that conservation is a "wiser and more efficient use of natural resources."

Any discussion of conservation involves a discussion of waste, for although these words are not exact antonyms, the apt statement has been made that "the antidote to waste is conservation." It has also been said that "what is apparently conservation in some cases is, in fact, profligate waste in others, and vice versa."

Conceptions of waste change with time. In the early days of the industry, destruction of oil by fire or spillage on the ground and down the creeks were substantially the only wastes recognized. In fact, in the early days of barging on Oil Creek, when kerosene was the desired product, destruction of the gasoline fraction of the oil was not looked upon as waste. In those days little was known about underground wastes and virtually no attention was given to them. However, their importance gained recognition with the passage of time, and in 1921 thought concerning them was stimulated by a Bureau of Mines bulletin on Underground Conditions in Oil Fields.

As domestic and industrial use of natural gas developed, waste of gas was looked upon as a regrettable loss of valuable fuel, but full realization that waste of natural gas results in loss of the agency for moving oil through the productive stratum and up the well came in relatively recent years, especially after publication in 1929 of a

treatise on the function of natural gas in the production of oil, prepared in the Bureau.

Two sources of physical waste are now well recognized—above ground or visible waste, and below ground or invisible waste—and it is recognized that in either of the above categories useless transformations of energy may be more important and represent a greater monetary loss than actual waste of the marketable substance. All who accept Dr. Holmes' definition of conservation will desire to minimize the quantity of oil left underground beyond recovery by economical means, just as they will desire to avoid needless blowing of natural gas to the air, loss of oil by evaporation and accidental fires, or any other useless expenditure of assets. Those who hold to such principles also will desire to prevent waste of reservoir energy.

CONSERVATION OF RESERVOIR ENERGY

MR. CATTELL. Probably the most significant trend of thought in oil and gas production is the growing realization that a producing structure is to be looked upon not only as a reservoir of oil and gas, but also as a reservoir of energy. Such energy, if properly conserved and used, will move the hydrocarbon fluids to the well and through it to the surface, delaying the time when energy must be supplied from external sources through gas or air injection, artificial water drive, the pump, or other means. It is well recognized now that effective use of the energy available from a natural petroleum reservoir will decrease the ultimate cost of recovery and increase the quantity of hydrocarbons that can be produced economically from the deposit. All who are aware of the fluid-energy attributes of a reservoir understand that dissipation of energy that could have performed effective work in bringing oil from the formation to the well, and thence to the surface, is contrary to efficient operation.

THE VICE CHAIRMAN. Would you permit a question, please? That is, whether or not, from an engineering standpoint, it might be expected, even though more expensive, to recapture from the land this oil that is left in the ground by reason of too great an escape of gas in proportion to the oil removed.

MR. CATTELL. Much of it can be recovered. When you let the natural gas—the gas originally in the reservoir—escape, you are reducing the pressure—

THE VICE CHAIRMAN (interposing). We understand that, but my question was whether or not—

MR. CATTELL (interposing). Through air and gas injection, or through artificial water drive, oil can be recovered, but at much greater cost. In Europe they have gone so far as to mine the sands, and that can be done but at much greater cost.

THE VICE CHAIRMAN. My only question was whether or not you could recover it by some means, even though it is more expensive.

MR. CATTELL. That is correct.

THE VICE CHAIRMAN. Thank you.

SENATOR KING. I suppose there would be some period where it would be so diluted the cost would be too great.

MR. CATTELL. One hundred percent recovery can never be expected.

SENATOR KING. If the sands are pretty well drained and at great depth, the cost would be almost prohibitive, then, of recovering the infinitesimally small percentage of oil still remaining.

Mr. CATTELL. The cost goes up as your reserve goes down, and it is just a question of how far you can go and stand the cost.

In general, any action which reduces pressure within a reservoir causes a decrease in the energy useful for moving and lifting the fluid. Reduction of pressure may result from removal of water as well as from removal of oil and gas. Also a considerable decrease in usefulness of the energy may result from a change in the position of a fluid, without any substantial decrease in its pressure.

The VICE CHAIRMAN. What is the explanation of that?

Mr. CATTELL. The explanation is coming in the next sentence.

For example, a given quantity of natural gas that has moved from within an oil body on the flank of a structure to a position in a gas cap on its crest may have become much less useful for moving and lifting oil, although there may have been no substantial change in the pressure to which it is subjected.

FLUID-ENERGY RELATIONS

Mr. CATTELL. To aid in developing a picture of the manner in which oil and gas are removed from the rocks and to point out the importance of relations of reservoir energy to movement of the fluids, which for convenience we have called fluid-energy relations, it may be helpful to quote the following from a chapter H. C. Fowler and I prepared for Bureau of Mines Minerals Yearbook, 1934:

In principle the fluid-energy relations of petroleum properties are relatively simple, but in detail they may be extremely complex. To reduce the concept to its simplest terms, consider an undrilled oil-bearing geologic structure of an ideal or "textbook" type. Its productive bed is a stratum of porous rock of substantially uniform texture, lying between two impervious strata, all arched into a dome. The strata are inclined downward, but with gradually increasing slope, from the crest of the dome to its periphery where they are substantially horizontal. From the periphery outward the beds are inclined upward, and at some point the porous stratum crops out at the surface. Assume for this discussion that enough water has entered and is retained in the porous bed to fill its voids to the lowest point of the outcrop.

From the outcrop downward to the periphery of the dome and thence upward toward its crest to an oil-water contact the voids of the porous stratum are filled with water. Inward and upward from this oil-water contact the voids are filled with oil, which is lighter than water and therefore lies above it. This oil contains lighter hydrocarbons, of the range found in natural gas, in solution. This simple structure contains more of these lighter hydrocarbons than the oil will hold in solution at the existing pressure, so the porous stratum will not contain liquid in the higher central part of the dome. Instead, natural gas, which is much lighter than the oil, will occupy the voids of the porous bed above a gas-oil contact. Thus the structure will contain a so-called gas cap.

This reservoir, until punctured by the drill, may be considered, for all practical purposes, to be in a state of equilibrium. Gravity is acting on both the rocks and the fluids.

At any level in the water-filled part of the porous bed the fluid is under pressure equivalent to a head of water from the lowest point of the outcrop to that level, and at any level in the oil-filled part of the porous stratum the oil is under a pressure equal to that at the oil-water contact minus the pressure exerted by the head of oil from the level in question to that contact. Likewise, at any point in the gas cap the gas is under a pressure equal to that at the gas-oil contact minus the pressure due to the head of gas between that point and the gas-oil contact.

It is apparent, therefore, that in such a virgin structure the forces are in balance. The water is pressing upward at the oil-water contact; but its pressure is counterbalanced by the pressure of the gas, acting at the gas-oil contact and transmitted through the oil, plus the pressure due to the head of oil between the two contacts.

If a well is drilled into the oil-saturated part of the porous stratum and opened to a lower pressure, the forces are unbalanced. The oil surrounding the well, with the lighter hydrocarbons in solution, starts to flow toward the point of lower pressure at the well bore. As the pressure on the oil is reduced some of the lighter hydrocarbons come out of solution, forming gas. This gas, in expanding toward the region of lower pressure, tends to push the fluid ahead of it toward the well, but some of the gas may by-pass the oil and move into the gas cap, doing little or no useful work.

The VICE CHAIRMAN. Now, Doctor, how would this gas move from its distributed condition into this gas cap, if the gas cap was filled with gas pressing downward?

Mr. CATTELL. As the gas is released from solution in the oil it seeks its natural level. It is lighter than the oil and tends to move upward through the oil, by-passing the oil.

The VICE CHAIRMAN. You mean when this oil is in process of being mined?

Mr. CATTELL. Yes. When the fluid reaches the well it consists of a mixture of oil (still saturated with lighter hydrocarbons) and gas. If the pressure and other conditions are adequate, the fluid moves up the well, the gaseous part tending to rise faster than the oil and to slip past it. As the fluid mixture reaches higher levels in the well, where the pressures are lower, more of the lighter hydrocarbons come out of solution joining the gas. Moreover, as this mixture rises and the pressure upon it decreases, the gaseous part expands, doing work on the fluid above it.

Then I have some paragraphs which catalog the sources of energy and the manner in which that energy is used. I believe it would be best to omit that part.

The VICE CHAIRMAN. You have used the expression "gas and lighter hydrocarbons."

Mr. CATTELL. We use the term "lighter hydrocarbons" to refer to those hydrocarbons which, under normal atmospheric pressure, are gas, but in the reservoir may be a part of the oil.

The VICE CHAIRMAN. When you first contact them they are gas, are they?

Mr. CATTELL. In the reservoir you have a mixture of hydrocarbons. You may have a liquid and a gas. But as the pressure and temperature change, some of the lighter hydrocarbons in the oil—those with the smaller molecular weights—come out of solution in the oil and move into the gas.

The VICE CHAIRMAN. Doctor, is the gas under greater pressure than gas is ordinarily subjected to?

Mr. CATTELL. Ordinarily, as you increase the pressure on an oil-gas mixture, gas goes into solution in the oil. The gaseous phase decreases in volume and the liquid phase increases, but it is a selective solution. The gas is a mixture of hydrocarbons, the oil is also a mixture of hydrocarbons, but the individual hydrocarbons do not go into solution in the proportions in which they exist in either fluid. It is a selective solution.

The VICE CHAIRMAN. Doctor, I just don't like to continue to ask questions, but you know so much more about it than I do it is hard for me to know just what you are saying. What I am trying to find out is: This hydrocarbon, the lighter hydrocarbon, what becomes of it? To what use is it subjected? Does it become usable gas, what we know as gas?

Mr. CATTELL. Yes.

The VICE CHAIRMAN. Then that is the answer. "Yes" is a very good answer.

Mr. CATTELL. The reason for using the term "lighter hydrocarbons" is that the use of "gas" to designate something that is in solution in the oil is misleading. The lighter hydrocarbons in the oil tend to go into the gas (become gaseous) with change in pressure.

Senator KING. The pressure produces heat and the heat converts oil proper into gas, or may.

Mr. CATTELL. If you have oil and gas in a reservoir and change the temperature or the pressure, something is going to happen. Some of the liquid will move into the gas or some of the gas will move into the liquid.

Senator KING. The pressure may be so great as to produce heat, and heat will have its effect up the oil and convert it into hydrocarbon or lighter gas.

Mr. CATTELL. The distribution of the many hydrocarbons between the gas and the oil depends upon the pressure and temperature to which the system is subjected. We do get into a peculiar situation—

The VICE CHAIRMAN. I didn't mean to lead you into that. I just wanted to know one thing: What became of that stuff you were talking about? We have it in the record.

Senator KING. For my information, may I ask one question: Conceive a situation where the country is so dry and arid, there is but little, if any, water in the ground for a considerable distance, and yet there is oil there. To what extent does the water make a contribution to the production of the oil?

Mr. CATTELL. In general, the hydrostatic pressure of the water pushing upward on the oil, on the outside of the structure, is the source of energy. That is the source of your pressure, and that water may have been in the sands for geologic ages.

Senator KING. There are some oil sands, are there not, where there is but a limited amount, if any, of water?

Mr. CATTELL. True. There are fields where there is little movement, at least, of water into the sands as the oil is removed.

Senator KING. So that, in that event, it would be heat and pressure that would aid in forcing the oil to the surface?

Mr. CATTELL. There is little change in temperature, but the oil moves to the surface because of the pressure, and when the pressure is gone, the only way you can move it to the surface is with a pump, and you can't use a pump to pump it through the sand. Its own pressure, or pressure you put in by a process such as water flooding or repressuring with gas or air is the only source of energy.

The objective in applying knowledge of fluid-energy relations is largely to move oil to the well and lift it to the surface, leaving a maximum of energy in the system available to do such work in the future. Each of the terms listed in taking stock of applicable energy and its expenditure, except the mechanical work represented by the lifting of the fluid against gravity from its original position in the sand to the surface, is subject to a measure of control through design or method of operation. Hence it is evident that the problem is one in which man may use his knowledge and ingenuity to his benefit.

In the next section, which I believe should be omitted, I have pointed out that in general the situation is much more complex than that described in the simple illustration I have given.

There are all kinds of complexities. We have picked the simple case for purposes of illustration.

Now, a section on the need for technical knowledge.

THE NEED FOR TECHNICAL KNOWLEDGE

Mr. CATTELL. The problems of oil and gas production are not limited to technology. They cut across the fields of economics, law, politics, and human relations. Some legal precedents that have their origin in ideas of the occurrence of oil and gas prevalent a half century ago and were based on economic situations greatly different from those of today have hampered the application of new scientific knowledge as it became available.

Moreover, much thought concerning oil and gas production has been based on inaccurate conceptions of the physical phenomena, and legislative bodies, courts, and the public have been insufficiently informed as to the natural laws upon which human action should be based.

To provide for wise development of the Nation's petroleum resources in the future, students of science and technology must supply the essential knowledge of natural laws. With a more adequate understanding of physical relations the technologist, economist, lawyer, statesman, and student of human relations may assist one another in solving problems as they arise. The special concern of engineers, chemists, geologists, and others whose chosen work deals with technical phases of the oil and gas industry is to gain knowledge of the physical relations that determine the behavior of oil and gas and to apply such learning toward efficient production and wise utilization of these fluid materials.

Technical advance has been noteworthy in oil and gas production. Drake's well was 69 feet deep and was drilled with a derrick 35 feet high. Some derricks now in use are five times the height of the one Drake used, but a well has been drilled to 15,004 feet, or about 218 times the depth of Drake's well. In earlier years operations were largely by rule of thumb; now the production of oil is conducted with the aid of the best engineering and geological advice and extensive laboratory facilities for both service and research.

Following the earliest period, as wells were drilled to greater depth and operating conditions became more difficult, engineers and geologists began to correlate underground formations from driller's logs, and by 1920 various kinds of cross sections, subsurface contour maps, and peg models in three dimensions were being used extensively in attempts to gain a better understanding of conditions underground. Now geologic logs made with the aid of micropaleontology have largely supplanted the logs based on information supplied by the drillers. As more wells were drilled by the rotary system, coring of formations developed, and now various devices are used with rotary and cable tools to obtain samples of rocks in a condition as nearly as possible like that in which they existed before being disturbed. All ordinary cores, however, lose fluid through reduction in pressure as they are brought to the surface. To provide more exact information concerning the rock and its fluid content in the formation the Bureau of Mines and the American Petroleum Institute are cooperating in development of a core barrel that will cut and enclose a sample at the bottom of the well and bring it to the surface without loss of pressure or fluid.

If time permitted, the improvements in the petroleum technology, aided by advances in metallurgy and other engineering fields, might be illustrated by discussions of various developments.

The VICE CHAIRMAN. I don't believe we would be tremendously interested in hearing about that.

Mr. CATTELL. I was going to omit this section which refers to the various advances.

On the whole, the petroleum and natural-gas industries have improved their practices through the application of technical knowledge, and many wastes that were common a few years ago have been minimized. The improvements in both efficiency and conservation are the result, in a large measure, of technical research and education.

Senator KING. Is it the lack of research and education that accounts for the enormous number of dry holes?

Mr. CATTELL. Certainly research will aid in reducing the number of dry holes—research along lines of exploration. As the more easily found deposits are developed the problem of finding oil becomes more difficult, and without the advance in technology of exploration there would be a marked increase in the number of dry holes.

Senator KING. Is it the lack largely of geological exploration that accounts for such a large number of dry holes?

Mr. CATTELL. The finding of oil is difficult. The geologist and the geophysicist can only use the information they can obtain by their known methods of study. Many holes have been drilled without the benefit of the best of geological and geophysical service. Some of those holes drilled without the benefit of those sciences have been successful, by chance, but the percentage of dry holes in a given condition of availability of unexplored reserves will decrease as the geophysical and geological knowledge increases.

Senator KING. It is like it is in mining. They used to say in the West that in order to find a mine you must get a man over from Ireland, an Irishman, and send him out and he would find it, though your professors failed. Most of our mines were discovered by Irish boys.

Mr. CATTELL. On the influence of research: Research and improvements in practice have had a marked effect not only in reducing surface waste and underground wastes such as losses of oil and gas to barren sands but also in reducing the quantity of oil left in original reservoir strata when fields are abandoned.

On this point my prepared statement quotes from a paper prepared by the Bureau of Mines for the Third World Power Conference in 1936, but I shall simply summarize it now. In 1915 estimates were made that from 80 to 90 percent of the oil originally in the sands was left when the wells were abandoned. A later study substantially verified that.

Approximately one-half of the total oil that has been produced in the United States was taken from the reservoirs prior to 1926, but during the 10 years from January 1, 1926, to January 1, 1936, 8.9 billion barrels of oil were produced, or a little more than all that had been produced in the preceding 66 years.

The VICE CHAIRMAN. We know a good deal about how much more oil is being produced than used to be produced, but what we want to know is, what are we going to do about that. We know

that you engineers have done a good job and have been constantly improving methods of discovery and methods of extraction.

Mr. CATTELL. Well, I understood that my assignment was to—

The VICE CHAIRMAN (interposing). I beg your pardon.

Mr. CATTELL. Build the background of that engineering knowledge, and I don't want to take the time unduly.

Senator KING. You are like doctors brought here to tell us about bone—they wouldn't care to go into the viscera.

Mr. CATTELL. The only function I had in the report from which this hearing arose was to collaborate in preparing a chapter on technology.

The VICE CHAIRMAN. I beg your pardon for interrupting.

Mr. CATTELL. I shall be glad to leave this. With your permission, I would like to have it in the record, since it has been prepared. It stresses the importance of research and tells what has been done and gives an indication of what is needed in the way of future research.

I shall next take up the section on unit operation, which I didn't know I was to prepare until yesterday afternoon.

UNIT OPERATION

Mr. CATTELL. To avoid taking time, I shall say that the first part of this is more or less of an historical statement. Mr. Stabler is much more familiar with unit operations on public and Indian lands, so we have only touched upon that.

The VICE CHAIRMAN. Doctor, does the historical statement you have cover the history of the actual application of the unit rule in production? That would be important, as to how the application of the unit rule is worked.

Mr. CATTELL. Mr. Stabler can tell you how it is worked on Government lands. In this statement there is a brief review of the way it is worked in some domestic and foreign fields.

The CHAIRMAN. Suppose you give us that, Doctor, and summarize it. It is really a very important subject. As a matter of fact, it has been a subject of some criticism before this committee. The charge has been made by some persons in the oil industry that unit operation and other methods of controlled production are used as devices for controlling price, so of course we are interested in the scientist's attitude and explanation of the system.

Mr. CATTELL. I think we can omit the introductory and historical material.

The CHAIRMAN. It will be printed in the record with your prepared statement.

Mr. CATTELL. We will then come down to a few specific cases.

It is pointed out in the prepared statement that in general unit operations have been on a voluntary basis. An outstanding exception is the compulsory unitization of city blocks in Oxford, Kans., prior to 1928, and then there is reference to literature on that development.

The unit development of the Van pool, Texas, operated as if under single ownership for the account of the associated companies, often has been referred to as an outstanding example of the application of efficient engineering technique permitting maximum recovery of oil and gas at minimum cost.

The operating agreement under the Van joint account became effective in November 1929, and it is reasonable to suppose that at present the operating company has essentially all of the geological and engineering information needed to plan a future program of extraction to the ultimate life of the field.

Then the prepared statement refers to a report on the Van field stating that the method of allocating production to each leaseholder has approached the ideal—giving to each participant the oil which he actually was entitled to have under his lease.

The CHAIRMAN. Now that is a very interesting statement. The impact of engineering technique upon the human equation, if I can so state it, is the circumstance which develops the conflict in this study of proration. You say that this is an ideal system in this particular instance.

Mr. CATTELL. I am really quoting from someone else, but Van is looked upon as an outstanding example of unit operation.

The CHAIRMAN. Do you mean that in that particular instance each individual landowner got exactly what he was entitled to without any question, with complete mathematical certainty?

Mr. CATTELL. Certainly not.

The CHAIRMAN. The statement was so broad that it might have justified that inference.

Mr. CATTELL. Those must be based on estimates. You cannot reduce such figures to exact mathematical certainty.

The prepared statement¹ gives some information concerning some work Bureau of Mines men did at Van to help the operators in determining the characteristics of their oil in the reservoir in order that they might better judge the equities in the settlement. I shall not go into that, except to say that it consisted of going into the reservoir oil at the bottom of the hole with a special instrument, taking a sample of the oil at the bottom of the well, closing it in with this special device, bringing it to the top of the well, taking it to the laboratory and putting it through a rather extensive analysis. That may all seem academic, but it had a very practical application to their problem of determining, as nearly as could be determined, what the equities were.

The CHAIRMAN. I have in mind an incident that happened in the development of the Salt Creek field. Mr. Stabler, who is with you here, and Mr. Soyster may recall the incident. A gentleman from New York, as I recall it, who had never seen an oil field in his life, who was certainly not a petroleum engineer, who knew nothing in the world about drilling, was induced to buy a lease in West Salt Creek, Wyo. He went out upon the land and every geologist in and around the field who had examined the land was of the opinion that it was worthless and no one would advise him where to drill the well, so he was forced to make the decision for himself. He went out on the field with his drilling crew and walked up and down on this strange terrain that he had never before seen, and finally he said, "We will drill the well here." They drilled the well and they got large production and my recollection is there wasn't another well on any 40-acre tract surrounding that which ever produced any oil in commercial quantities.

¹ "Exhibit No. 1310," appendix, p. 9850.

Now how would unitization apply in such a circumstance?

Mr. CATTELL. Well, I will have to refer that to Mr. Stabler because he has been up against that problem. I remember the well you speak of, but that is Mr. Stabler's "baby."

The VICE CHAIRMAN. On that point, would you have to dig some wells, shall I say, of exploration in order to find out the scope of the field and how the sand shades off or thins out, however you want to express it?

Mr. CATTELL. Unit operation on an equitable basis requires accurate knowledge of the structure.

The VICE CHAIRMAN. How can you get that except by drilling?

Mr. CATTELL. That knowledge must be developed as the development goes forward, and the thing must be adjusted to take account of that new knowledge.

The VICE CHAIRMAN. Let me get at this. Going into a field, you put down one well, and here are a lot of people that own land all around it. How are you going to determine whether the man who owns the second section from the well is to participate in the first production? How do you know who has a right to be in on the thing from the start?

Mr. CATTELL. Those are difficult problems—

The VICE CHAIRMAN (interposing). I know they are difficult, and that is why I am asking you how you do it.

Mr. CATTELL. I believe they have been worked out very successfully in unitization on public lands.

The VICE CHAIRMAN. How? In public lands you have just one owner of that, haven't you?

Mr. CATTELL. No; a number of operators have leased lands from the Government. Kettleman Hills is an example.

The VICE CHAIRMAN. How do you do it, I ask?

Mr. CATTELL. I believe that Mr. Stabler can tell you much better than I can, because he has it first-hand; that is his problem.

The VICE CHAIRMAN. It is pretty good to have somebody behind you. [Laughter.]

Mr. CATTELL. Yes; it is very helpful to have somebody to refer these questions to.

Then one of the difficulties in the development of unit operation on private land is that the royalty owner expects his royalty and introduces another human element that makes an agreement difficult.

There is a brief discussion in the prepared statement of the Sugarland oil field in Texas, which has been an outstanding example of a unit operation, but substantially all under the control, as to lease holders of one company. There were several royalty interests, but those royalty interests consented to the agreement and have been compensated, and so far as I know, things have worked out pretty successfully.

Senator KING. If you will permit my projecting an inquiry into your paper at this point, are you familiar with the proration system which has been set up in Texas, and as to which we have had some valuable testimony?

Mr. CATTELL. Not closely familiar with the administrative details.

Senator KING. Do members of your organization, and I speak of the four organizations of which the preceding witness testified, point to that as one of the methods of dealing with this very complicated and complex problem? That is to say, that the State may exercise

its authority, possibly supplemented by the authority of the Federal Government in impinging upon the rights of individuals and determining how they shall operate their wells and how they shall divide, and so on, prorate.

Mr. WATKINS. May I say, Senator, in response to that question that the next witness, Mr. McLaughlin, will discuss the subject of proration from the standpoint of its effect on conservation.

Mr. CATTELL. Tepehate, La., is another example of an outstanding field under unit operation. There again, however, it was substantially a one-company ownership.

Then, in foreign lands the operations of the Anglo-Iranian Oil Co. and the Iraq Petroleum Co. and of the Standard Oil Co. of California on the Island of Bahrein, are outstanding examples of the functioning of unit operation and the application of technical practices on a large scale in countries in which concessions permit full control of large blocks of acreage comprising one or more geologic structures where oil and gas have collected in commercial quantities.

Then in reference to statements by Sir John Cadman of the Anglo-Iranian on the advantages of unit operation as conducted by his company under concession: He points out that through those unit operations, they have conserved the gas energy to assist in the movement of oil through the natural reservoir and used the natural expulsive forces economically. He discusses advantages that have accrued because of lower development cost through elimination of unnecessary drilling and multiplication of plants. Then he points out that 45 wells have been sufficient for effective delimitation of the field and to meet the production requirements of their pipe line with a capacity of 30,000,000 barrels per annum.

The VICE CHAIRMAN. How big a field is that?

Mr. CATTELL. I haven't the acreage. This is Kirkuk, which is a large field, but I should hesitate to try to tell what the acreage is.

Haft Kel is another field which has produced approximately 27,000,000 barrels from 40 wells, and they consider those 40 wells, according to Cadman's statement, to be sufficient to determine the limits of the field and for their production purposes.

The VICE CHAIRMAN. How big is that field?

Mr. CATTELL. That is one of the large fields of Iran, but I should hesitate to try to give the acreage. I think I can insert it into the record if that would be helpful.¹

¹ Later Mr. Cattell supplied the following for the record:

Ben B. Cox of Socony-Vacuum Oil Company, Inc., has reported that the Kirkuk field of Iraq produced about 126,000,000 barrels of oil in 11 years from the beginning of production to the end of 1938, of which about 31,000,000 barrels were produced in 1938 (Petroleum Development and Technology, 1939, Transactions of American Institute of Mining and Metallurgical Engineers, vol. 132, p. 569).

The Kirkuk field may be compared in production with the Kettleman Hills field of California and the Rodessa field of Arkansas, Louisiana, and Texas. To the end of 1938 the Kettleman Hills field produced about 202,000,000 barrels of oil in the first 10 years of its life, of which 25,600,000 barrels were produced in 1938, and the Rodessa field produced about 83,000,000 barrels of oil in 9 years of life, of which about 27,500,000 barrels were produced in 1938 (Minerals Yearbook, 1939, Bureau of Mines, p. 940, and Petroleum Development and Technology, 1939, Transactions of American Institute of Mining and Metallurgical Engineers, vol. 132, pp. 242, 255, 342, and 410).

Referring next to the Haft Kel field of Iran: The Anglo Iranian Oil Company reported in 1936 that 50 square miles of oil-bearing area had been proved (Petroleum Development and Technology, 1936, Transactions of American Institute of Mining and Metallurgical Engineers, vol. 118, p. 477). In 1939 the same company reported that the Haft Kel field produced about 50,000,000 barrels of oil in 1938 (Petroleum Development and Technology, 1939, Transactions of American Institute of Mining and Metallurgical Engineers, vol. 132, p. 567). For comparison it may be mentioned that the entire State of Kansas produced about 60,000,000 barrels, and the entire State of New Mexico about 36,000,000 barrels, in the same year (Minerals Yearbook, 1939, Bureau of Mines, p. 939).

The VICE CHAIRMAN. Forty wells in a little field—

Mr. CATTELL (interposing). Those are both large fields.

Senator KING. Have investigations been made by you witnesses here, or others, acting under the direction of the committee, to ascertain whether or not in these various fields, in Iraq, Mesopotamia, and in Mexico, and Rumania, and the oil fields of Baku which I visited a number of years ago—whether we have devised better means of conserving the oil and meeting the definition which was given at the outset of your testimony as to the best means of conserving the resources of the country. Have any of your witnesses ascertained whether or not in other countries, in the operation of their oil fields, they have developed methods that are more economical and efficient than those which prevail in the United States?

Mr. CATTELL. Personally, I have no first-hand information.

The CHAIRMAN. What is your opinion, Mr. Stabler?

Mr. STABLER. I have no knowledge of the foreign operations at all.

The CHAIRMAN. Mr. Soyster?

Mr. SOYSTER. I have no personal knowledge but it is my opinion that one reason that better methods can be applied is because of the ownership of mineral in many of those countries by the Crown or the Government. There they can deal as an individual property and they lease these large concessions which are controlled by a single corporation, then it isn't a question of beating your neighbor to getting the oil out but producing it on the most efficient basis.

The CHAIRMAN. In other words, the unit ownership under other forms of government, and unit control would tend to greater conservation than diverse ownership such as we have here.

Mr. SOYSTER. Yes, sir; that has certainly been our experience with unitization of the public lands.

Mr. CATTELL. There certainly are advantages from the standpoint of conservation and efficiency.

The CHAIRMAN. Now the engineer is thinking of this problem solely from the point of view of conserving the oil in the ground and producing the maximum eventual output, is that right?

Mr. CATTELL. The maximum eventual output may not necessarily be the objective.

The CHAIRMAN. What is the objective?

Mr. CATTELL. It seems to me that the objective is a dependable supply at reasonable cost over a long period.

The CHAIRMAN. So that in your approach to this problem, cost enters as well as the preservation of a dependable supply.

Mr. CATTELL. It seems to me that it should.

The CHAIRMAN. I am not asking whether it should or should not. I am asking whether it does.

Mr. CATTELL. Cost certainly enters your problem.

The CHAIRMAN. But in your study of it, in your approach to it, in your action on it, do you take into consideration both of these factors, cost and conservation?

Mr. CATTELL. Yes.

The CHAIRMAN. So that the question of price has a bearing in any determination that you as a scientist in the Bureau of Mines would make.

Mr. CATTELL. It certainly has a bearing on our thinking as to what is practicable.

The CHAIRMAN. Then do you think that conservation policy is used in any degree whatsoever as a price regulant or regulator?

Mr. CATTELL. That is a difficult question. Our work in the Bureau of Mines has been not on regulation but upon development of the fundamental engineering facts.

The CHAIRMAN. Let me ask you then as a scientist, would the price which the public has to pay for oil be a circumstance in the decision which you personally would reach as to the amount of oil which should come out of a particular field under unit operation?

Mr. CATTELL. In considering what is practicable from the standpoint of ultimate recovery, from the standpoint of dependability of supply over a period, the cost of the operation certainly is a factor. The thought I had in mind when I made that remark about ultimate recovery was that there is no advantage in a flood of oil with resultant waste and low price at one period at the expense of a shortage and resulting high prices in another.

The CHAIRMAN. Are you using the words cost and price interchangeably?

Mr. CATTELL. No; I am thinking in terms of the cost of the operation.

The CHAIRMAN. Are you thinking at all in terms of price to the consumer?

Mr. CATTELL. No; I have been thinking in terms of the cost of the operation to the producer.

The CHAIRMAN. Well, then my question recurs: Would the price to the consumer have any controlling force in any determination that you as a scientist might reach with respect to what the proper production from a field should be under the unit plan?

Mr. CATTELL. Only insofar as the price to the consumer is affected by the cost of operation. Understand that we in the Bureau of Mines have no authority over unit operation anywhere.

The CHAIRMAN. That is why I was putting it on the basis of your personal decision.

Mr. CATTELL. Our thought on the matter is from the standpoint of a research agency interested in the technical facts.

The CHAIRMAN. What about the function which the Bureau of Mines does perform with respect to the estimates of consumption? Consumption is obviously a factor which is constantly under consideration in the Bureau of Mines.

Mr. CATTELL. Yes. That work is not under my jurisdiction. That is under the division headed by A. G. White, and I have no first-hand information concerning the statistical work. That is handled in a different branch of the Bureau under a different head.

The CHAIRMAN. Well, you know about it.

Mr. CATTELL. I know in a general way of those estimates of demand.

The CHAIRMAN. Would you care to say whether or not price enters into the determination of those estimates?

Mr. CATTELL. My understanding is that price does not enter into the determination, but that is a matter on which I haven't first-hand knowledge. A. G. White is the head of that division, and as I say, that is statistical work. Ours is technical. But my understanding is that price does not enter into it.

Senator KING. May I interrupt your statement for a moment and ask Dr. Watkins a question? I assume, Dr. Watkins, that you and your associates desire to furnish information to this committee, assuming that it may be called upon to make recommendations for legislation, and therefore you are desirous to furnish us full information as to the mistakes which have been made, the pitfalls to be avoided. Have any persons in your group made studies of the oil industry, the oil operations in other countries, with a view to getting information which would be advantageous to be presented to this committee and that might aid us in reaching conclusions as to recommendations which we might make?

Mr. WATKINS. Senator, I don't believe that any of the members of this group have made field investigations in these foreign producing areas, but I can tell you that the literature on foreign experience has been summarized to some extent in this publication, *Energy Resources and National Policy*, and that it will be referred to likewise in Mr. McLaughlin's testimony. It is lessons of that experience from the standpoint of conservation.

Senator KING. There have been criticisms of waste and inefficiency in the operation of oil fields in this country. If other nations have adopted different plans which have been more effective, it seems to me we should have information, not necessarily from persons who had visited those fields, but from reading the literature that would be helpful to us.

Mr. WATKINS. Mr. McLaughlin does have testimony along that line. I think the summing up the Senator gave a few minutes ago more or less hit the nail on the head. That is to say, where you have unitary ownership you have the possibility of applying engineering principles and techniques and procedures in the exploitation of those geological structures. You are not confronted then with conflicting interests coming out of multiplicity of ownership and you can look at that reservoir as a machine and you will utilize that machine in the most efficient way possible.

Senator KING. But in other countries all of the lands are not owned by the Crown and they are not operated in a unit. They are under individual ownership and individual development. That was true in the Russian oil fields, as I recall.

Mr. CATTELL. In Iran and Iraq and the Bahrein Islands, the operation of a field is under the control of one company.

Senator KING. The Bahrein Islands is under the control of an American company?

Mr. CATTELL. Yes; and they can plan their operations on the basis of the structure as a whole.

Senator KING. Yes; I am familiar with those oil fields there and their plans of operation. I was hopeful we might get some information that might aid us in determining just what, if any, recommendations we should make.

Mr. WATKINS. Mr. Chairman, the next scheduled witness is Mr. McLaughlin.

The CHAIRMAN. Very well, Mr. McLaughlin.

Mr. McLAUGHLIN. I am a graduate of Colorado College and studied at the University of New Mexico, at Harvard University, and at Columbia University, and I was at the University of Pittsburgh for 10 years as industrial economist in the Bureau of Business Research.

During 1937-38 I was economic consultant to the Pennsylvania Oil Industries Investigation Commission, and, as Dr. Watkins has said, I am the author of a section of this study on Energy Resources of the National Resources Committee. At the present time I am assistant professor of economics at Hunter College in New York City.

ECONOMIC ASPECTS OF CONSERVATION AND WASTE IN OIL PRODUCTION

Mr. McLAUGHLIN. My discussion is of the economic aspects of waste and conservation in the production of petroleum.

The building up of a larger productive mechanism than is necessary to produce oil and gas has involved the investment of excessive funds in the industry. Inadequate State and Federal restriction on production in new oil and gas fields has led to the drilling of excessive numbers of wells, especially in areas of flush production. The most important source of capital waste lies in this drilling of unnecessary wells. In the East Texas field alone it has been estimated that 3,000 wells would have been sufficient for production and that in the drilling of 21,000 additional wells perhaps \$300,000,000 has been wasted up to the middle of 1937. Moreover, new and unnecessary wells are being added to the field at an additional cost of about \$13,000,000 to \$20,000,000 per year. In the Oklahoma City field it was estimated by an oil-company official that \$3,000,000 would have been sufficient under a rational system of production instead of the estimated expenditure of \$70,000,000 up to the middle of 1930. Since then, additional millions have been invested in the field.

Competitive development of oil pools results also in excessive costs of operation. The loss of reservoir energy resulting from the high density of wells requires that pumping be initiated at a relatively early stage in the life of the pool. Moreover, the obtaining of the remainder of the recoverable crude takes more time, which in turn means extra labor and a longer use of capital. Even so, from a business point of view rapid recovery is often profitable. The operator may be able to get back in a few days his total investment in the well. Yet these methods clearly result in social waste and in the long run in a decreased company operating profit. In some fields the excess cost of obtaining oil under conditions of intense drilling has led to the bankruptcy of most operators. In the Oklahoma City field, nearly all operators failed, except some of the large concerns.

These capital wastes are clearly worth avoiding but capital is more or less replaceable. Even more serious to the Nation is the waste of large quantities of natural gas and petroleum—irreplaceable resources.

For the period 1922 through 1934 the waste of natural gas averaged $1\frac{1}{4}$ billion cubic feet of natural gas per day or a total of nearly 6 trillion cubic feet. The wastage equaled nearly one-third of the total volume utilized. Great waste of natural gas occurred in the Panhandle field in Texas during 1934 when more than a billion cubic feet of gas was blown into the air each day.

While the waste of gas in Texas has been reduced from 400 billion cubic feet in 1934 by more effective State regulation and by connection with markets, it still amounted in 1937, the latest year for which data are available, to nearly 100 billion cubic feet. Part of the tremendous waste of natural gas was intentional. The gas was blown

into the air either because of the lack of a market or because of the desire to obtain oil as soon as possible.

The proportion of oil left in the ground which can be classified as waste depends on the extent to which the most efficient methods are being used. Although variations in recovery depend more on the nature of the reservoir there are still significant variations which result from the use of more or less antiquated methods. It has been demonstrated by the United States Bureau of Mines that where the reservoir energy is wasted only about 10 percent of the potentially obtainable crude actually will be produced. Operating methods in actual effect were recovering from 20 to 35 percent of the oil in 1934, the variation depending largely upon the permeability of the sand. At the same time it was pointed out that by the general adoption of the most efficient known methods recovery would vary from 30 to 60 percent.

One of the major causes of waste of oil and gas relates to the right of the individual landowner, with few exceptions, to capture all of the oil and gas which is produced from wells on his property. The migratory nature of oil, when the static-pressure balance in the pool is disturbed by drilling, leads to a movement of oil in the direction of reduced pressure. Consequently, a well can and often does drain reserves from adjacent property. In many fields, the adjacent landowner has no effective way of protecting his subsoil mineral rights other than to drill offsetting wells as quickly as he can. In the effort to recover the maximum of oil in the minimum of time, a large proportion of the reservoir energy may be wasted. The speed with which new fields are brought into flush production makes it unlikely that adequate marketing facilities will be available for the accompanying natural gas until after large quantities of this fuel are blown into the air.

The wastes resulting from the operation of the right to capture are accentuated in many fields by the smallness of individuals landholdings. In suburban districts or even within incorporated communities the intensive efforts to recover oil have led to wells being drilled within a hundred feet of each other. Under such circumstances waste is excessive. One of the first successful efforts to restrict excessive drilling occurred in the city of Oxford, Kans., in 1928.

Senator KING. The waste would be a capital waste, would it not?

Mr. McLAUGHLIN. Yes; also a waste of the gas and a waste of the crude.

Overdrilling of the new Illinois oil field is in large part attributable to the unrestricted operation of the rule of capture in a district of small landholdings.

The CHAIRMAN. Do you mean that in your opinion there is now overdrilling in Illinois?

Mr. McLAUGHLIN. Oh, yes; from the standpoint of the recovery of crude. Waste also results from the fact that oil and gas fields are being discovered in a large number of States and that possible oil-bearing territory is still very great. In the search for oil and gas the most easily accessible and richest deposits are likely to be removed first. Such practices lead not only to the removal of some of the best grades of crude oil as soon as discovered, but also to the use of less costly equipment. The largeness of reserves of oil and gas leads to an emphasis on saving capital rather than the saving of resources.

The abundance of possible oil-bearing strata and the inadequate restriction of drilling efforts lead to serious overproduction if a major oil field happens to be discovered in a period of business depression. Such a situation occurred in the Seminole field in Oklahoma in 1927 and in the East Texas field in 1931. The rush to drill wells in a new field is just as great in a period of depression as in a period of prosperity. If drilling operations and production are not restricted somewhat in relationship to the changes in demand, prices of oil and gas will fall, and efforts to conserve supplies of oil and gas are likely to be dropped. Producers have no time to save gas when there is a race between adjacent leaseholders to acquire a greater proportion of the more valuable crude oil, nor are efforts to conserve or use residue gas successful if there is competition among producers to withdraw the natural gas from a field and make natural gasoline from it. The possibility of obtaining part of the resource from under another's property promises a greater reward than efforts to conserve the oil and gas already obtainable.

During periods of overproduction marginal wells are likely to be shut down; and if the price of oil threatens to remain low for some time, the wells may be abandoned and the equipment moved to more profitable areas. This practice results in substantial hidden losses in ultimate recovery from these abandoned wells; for if prices had been somewhat higher, it might have paid to continue their operation or even to install improved equipment. Once oil wells are plugged, it may be impossible to open them up again after prices rise above their costs of operation. The abandonment of wells because of low price of crude has been estimated to constitute a considerable economic loss.

Probably in every oil and gas field in the country wastes result because of the use of inefficient methods and out-of-date equipment. The explanation may be related to the low price of oil and gas, to ignorance of the best geological and engineering advice, or to lack of capital, and hence inability to take a long view. The advantage of a new method is very difficult to establish in the oil industry because of the uncertainty about what occurs in the reservoir. Only after considerable experimentation is a change made to the more up-to-date procedure. Thus, only within the last decade or so has the function of reservoir energy been fully appreciated, although experiments in some kind of control of the gas-oil ratio were made years before.

Unit operation is the most thoroughgoing solution to the problem of waste, a solution used but rarely in this country outside of Federal lands. By unit operation is meant the development as a whole of a geological structure according to a definite program, royalties to be shared on the basis of acreage, oil in place, or some generally equitable arrangement regardless of the location of producing wells. In effect, unit operation is the opposite of the present competitive system of wastefully developing oil fields. It is recommended primarily as a conservation measure, although it may serve the purpose of more effective stabilization of the industry and has been advocated at different times for this purpose alone.

The major characteristics of unit operation are preliminary exploration in the case of new fields—that means the drilling of exploratory wells—compulsory pooling of interests, proper well spacing, acceptance of standard development and production methods, controlled withdrawals, and general scientific control. Although

unit operation may be established in old pools and even in new pools without preliminary study of reservoir conditions, careful definition of the pool limits and of the nature of the reservoir are desirable preliminaries.

Effective unit operation requires the compulsory pooling of both operating and lease interests. Compulsory cooperation among adjacent land owners is a well-known legal procedure.

The VICE CHAIRMAN. How do you do that? You say it is well known. I don't want to go too far into it, but is that compulsion exercised by the State under its general powers or by the Federal Government?

Mr. WATKINS. I think the next sentence will take care of that.

Mr. McLAUGHLIN. Usually by the State, as I understand it. For many centuries it has been a recognized function of government to prescribe regulations for the better and more economical management of properties which adjoin or for some other reason can be better managed or improved by joint operation. The police powers of the State clearly extend to the conservation of its natural resources. Under their police power the States can prescribe methods for the extraction of oil and gas from a common pool on either of two bases: To protect the public interest against waste, or to insure a just distribution among collective owners.

Senator KING. There is some limitation, however, is there not, upon the police power of the State?

Mr. McLAUGHLIN. Yes; of course.

Senator KING. If it waits too long there is a *sine qua non* which warrants legislation. All we need to do is to look at the thousands and tens of thousands of little stores set up in various parts of the United States, the failures of which every year run into the thousands and tens of thousands of dollars. There is no suggestion that the Federal Government deny you or me the right to get a thousand dollars and set up a little grocery store, though by the mortality tables we would fail at the end of a year, perhaps.

Mr. McLAUGHLIN. Incidentally, in that connection the Pennsylvania commission recommended the possibility of legislation restricting the number of filling stations to be located in certain districts.

Senator KING. We have had waste in timberland, too; we have had waste in many of the private activities in which the American people are engaged, and capitalistic wastes along those lines have been very, very great. The mere fact that there may be losses of capital and some waste would not justify, would it, generally speaking, the State or the Federal Government stepping in and controlling and regimenting the activities of individuals, determining the businesses which they should operate and the amount of capital which they should invest in a particular industry.

Mr. McLAUGHLIN. There are, however, I believe, cases in which State regulation has been upheld on the basis of the public interest, in avoiding waste.

Representative WILLIAMS. In that connection, what States, if any, have passed these compulsory unitization laws?

Mr. McLAUGHLIN. In the State of New Mexico, the regulatory commission has the right to require unitization, and the Regulatory Commission of Arkansas has a somewhat similar right.

The CHAIRMAN. Texas?

Representative WILLIAMS. Not Texas.

The CHAIRMAN. Not the unit plan, but proration.

Representative WILLIAMS. The compulsory unit-operation plan. New Mexico and Arkansas are the only two States that have passed legislation on that question?

Mr. McLAUGHLIN. That is right. There are provisions for unitization within well spacing tracts in Oklahoma and Louisiana, but their legal position is not quite clear, not quite certain.

Representative WILLIAMS. Has there been any trouble in the administration of that law?

Mr. McLAUGHLIN. It hasn't been attempted a great deal except in New Mexico. It is more or less in an experimental state at the present time. They are relatively recent laws.

Mr. HENDERSON. Mr. McLaughlin, is the power for compulsory unitization derived from the same source as that for control of water-power sites? Is there an analogy there?

Mr. McLAUGHLIN. Yes; I should think there would be, certainly.

Mr. HENDERSON. It is a resource, and this has to do with conservation of a resource, the same as water-power resource.

Mr. McLAUGHLIN. Yes; I believe it would be sustained on approximately the same grounds.

Senator KING. There is a very great differentiation.

Mr. McLAUGHLIN. I dare say there are differences, though I am not a lawyer.

The CHAIRMAN. There is a difference between conservation either by the way of the unit plan or proration of the development of a national resource and control of the number of filling stations as suggested by the Pennsylvania commission. I think that was the distinction between what Commissioner Henderson was thinking of and what Senator King was thinking of. The grocery store would be analogous to the filling station, and the water resource and the oil resource would be analogous.

Mr. McLAUGHLIN. While unit-operation facilitates the general adoption in an oil field of the best current engineering and production practices, it does not, of course, guarantee these practices, since they are partly a result of effective governmental regulation and of intelligent local management. Preliminary exploration can discover the extent and nature of the pool, and continued measurements can give a guide to the most effective production procedure. Unit operation, for example, will allow production at various rates, the use of wells for somewhat different purposes—

The VICE CHAIRMAN (interposing). What do you mean by "using wells for somewhat different purposes?"

Mr. McLAUGHLIN. Some wells can be used for injecting water or gas into the field. Wells can be produced at different rates, the spacing of wells in relationship to the contour of the pool, the abandonment or shutting in of wells as water or gas ratios become excessive, and the adoption of pressure maintenance or other secondary methods of recovery.

Thus unit operation can lead to the reduction of production costs by eliminating unnecessary drilling.

The VICE CHAIRMAN. You speak of conserving the gas necessary to

press the oil up. What is the proposition, you would choke the vent and tend to hold the pressure back so you can get a greater percentage of oil?

Mr. McLAUGHLIN. I think the speed with which the gas is lost depends somewhat upon the speed of production. If you produce very fast you may make very poor use of the gas pressure.

The VICE CHAIRMAN. But I was asking specifically with reference to the proposition, for instance, if your casing is this big around, as big around as this glass, and you reduce it to a quarter of an inch across; would you expect to extract a larger percentage of the oil than if you let it run wide open?

Mr. McLAUGHLIN. That would depend somewhat on the size of the reservoir and the pressure of it.

The VICE CHAIRMAN. In certain reservoirs, then, with considerable pressure, you wouldn't have to do that in order to get the maximum of extraction.

Mr. McLAUGHLIN. That is right, as I understand it, but in others you would. The practice is as you suggested, but it wouldn't always be necessary.

The VICE CHAIRMAN. Would the necessity to use it be the exception or the reverse, assuming that you didn't have too many wells.

Mr. McLAUGHLIN. Well, if you didn't have very many wells it wouldn't be necessary. It is only when you have a large number of holes punctured at the top of the reservoir that you need to do that. That isn't done, for instance, by the Anglo-Iranian Oil Co. in Persia where they will have perhaps only 45 wells in a field, while we will have probably 5,000.

The VICE CHAIRMAN. They don't use that? It wouldn't be necessary then?

Mr. McLAUGHLIN. No.

The VICE CHAIRMAN. So then in a system of unit production you wouldn't have to resort to that sort of method in order to get the maximum of oil out.

Mr. McLAUGHLIN. I should think usually not. I am not an engineer, but that is my understanding.

Unit operation can lead to the reduction of production costs by eliminating unnecessary drilling, by maximum utilization of reservoir energy for lifting oil to the surface, by avoiding a high initial peak in capital investment and surface-plant equipment, which is ordinarily in use only a short time, by avoiding a similar peak demand for auxiliary services, such as roads, water supply, and staff accommodation, and by offering possibilities for research and constant checking on production methods.

The VICE CHAIRMAN. Would you let an engineer give an opinion on that point we were discussing?

Mr. WATKINS. Mr. Soyster might say something on that.

Mr. SOYSTER. I think, in fact I know, in many fields, even with high initial pressure, wells are flowed through tubing more frequently than not.

The VICE CHAIRMAN. What do you mean? Do they reduce the orifice?

Mr. SOYSTER. Yes. If you had a production string of a 6-inch or 8-inch casing, whatever size it may be, they may run a string of 2-inch or 3-inch tubing inside that and flow the oil through the tubing. In

the first place, you conserve your gas pressure and you produce more oil, and, of course, you must regulate pressures and the relationship of oil and gas production so as to get the maximum efficient rate of flow. You use the smallest volume of gas to lift the greatest volume of oil, and only through experimentation with a particular well can you determine the maximum efficient rate of flow. No two wells will necessarily be the same, even though they be offsets. In some cases still further restriction is obtained by putting in a choke or what is called a flow bean; the same principle is involved. The purpose is to lift the column of fluid and produce the well over a long period of time. In the first place, where you are trying to flow through a 6-inch string of pipe you have a greater column of fluid to be lifted, and it requires more energy to lift that whole column of fluid 6 inches in diameter, or 8, than to lift a column 2 inches in diameter.

The VICE CHAIRMAN. Do you run this small pipe down the full length, down to the oil sand?

Mr. SOYSTER. No; not necessarily clear to the bottom, but depending upon the thickness of your sand and the amount of oil in the hole where your fluid level might be.

The VICE CHAIRMAN. Is there advantage, so far as conservation is concerned, in putting a small choke, or whatever you want to call it, not very far down, right at the exit?

Mr. SOYSTER. As I see it if you choked a well at the surface you would reduce the volume of production; of course, you might reduce the amount of gas, you probably would.

The VICE CHAIRMAN. But you have your oil right at the mouth.

Mr. SOYSTER. But you are lifting, and if you only take so much out, that fluid in the hole would be held there by the pressure.

The VICE CHAIRMAN. In other words, the lower you go with a small tube the—

Mr. SOYSTER (interrupting). The longer you can flow your well.

The VICE CHAIRMAN. The better the reduction on the pressure.

Mr. SOYSTER. Of course, you will find variations, as I said, from well to well and field to field. Mr. Cattell might add something to that.

Mr. CATTELL. That problem is a complicated one which depends upon the viscosity of your fluid, the quantity of gas available, and various other factors. The problem is to produce your oil with the minimum quantity of gas, and you cannot lay down any general rule as to how that may be done. As Mr. Soyster has pointed out, it is a question of the individual well, the individual conditions.

The VICE CHAIRMAN. We had some testimony on the question of conservation.¹

Mr. McLAUGHLIN. Of course, you wouldn't be restricting production and holding it back under the worst conditions in excessive competitive drilling. In that case it is a race between adjacent land-owners to get out what you can as fast as you can, because even though you waste great quantities of oil you have got to get it before your neighbor gets it or you get nothing.

The advantages of unit operation, then, make it possible to have production spread over a period of time and to use these better engineering practices.

¹ Dr. Joseph E. Pogue, whose testimony appears in Hearings, Part 14, and Col. Ernest O. Thompson, whose testimony appears in Hearings, Part 15.

Mr. O'CONNELL. From your standpoint, do you think it is undesirable to spread production over a longer period of time?

Mr. McLAUGHLIN. Yes.

Mr. O'CONNELL. Apart from the question of the total amount of oil obtained from the well?

Mr. McLAUGHLIN. Well, of course, you can't separate them.

Mr. O'CONNELL. I thought of it because you indicated that there was some advantage to spreading production over a longer period of time. Is there any, if no more oil is produced, in total?

Mr. McLAUGHLIN. Perhaps some advantage in stabilizing the market.

Mr. O'CONNELL. That is what I was getting at, but is that the function of conservation?

Mr. McLAUGHLIN. I think it is so closely related to it that it does have to be considered.

Mr. O'CONNELL. I have so heard a number of times before this committee. It hasn't been made clear to me, though, that the stabilization of market or the stabilization of price has anything to do with conservation of the total supply.

Mr. McLAUGHLIN. Yes; I think it does. You can't overproduce oil without wasting it. Of course, there is waste in use and waste in storage.

Mr. O'CONNELL. You mean that if you produce so much that the price goes very low it would be used for what you might think of as uneconomic purposes.

Mr. McLAUGHLIN. Yes.

Mr. O'CONNELL. It sounds like rationing of oil.

Mr. McLAUGHLIN. And also the fact that if more oil is produced and the price goes very low, oil companies won't make any effort to conserve; it won't pay to conserve.

Mr. O'CONNELL. They won't what?

Mr. McLAUGHLIN. They won't make efforts to conserve the oil.

Mr. O'CONNELL. You mean there is going to be a certain amount of physical waste of oil after it got above ground; not used at all?

Mr. McLAUGHLIN. That is right; and, as you suggested, you will have temporarily oil taking away markets for coal as long as the price is cheap, as indeed occurred in 1931.

Mr. O'CONNELL. That is a little different conception of conservation from the one I had. That is the reason I was asking the questions. It seems to me that you almost go to the point of rationing as to the supply of oil over a long period of time under conditions that you seem to assume are necessary to meet.

Mr. McLAUGHLIN. I don't think by conservation we mean to reserve any quantity of oil for the future, although it certainly isn't an irrational thing to consider. The only difference between the production costs of gasoline and the production costs of substitutes being in a ratio, roughly, of 1 to 4, perhaps three to four times as costly to produce motor fuel from coal or other sources, conservation might well include some reservation of resources.

Mr. O'CONNELL. It is also difficult to ascertain or to estimate the importance of that particular factor, since we have no way of knowing when we will ever, if ever, reach the point when we will have to make oil from coal or from some other thing. In other words, exploration,

I take it, is still developing new sources of oil as rapidly or more rapidly than we are consuming oil.

Mr. McLAUGHLIN. Yes. All we know is that every time we find a new oil field there is one less oil field to be discovered.

Mr. O'CONNELL. But we don't know how many—how far we have to go.

Mr. McLAUGHLIN. Not yet. We have in reserves, I suppose, roughly, 14 times the present annual consumption. That isn't a great reserve.

Mr. O'CONNELL. That is more than we ever had before.

Mr. McLAUGHLIN. That is right.

Mr. O'CONNELL. Do you think it is a coincidence that years ago when there was a much smaller proven supply of oil and we were apparently much nearer the end of our supply there was much less talk of conservation and proration than there is now; that the picture is much brighter in terms of reaching the end of the road?

Mr. McLAUGHLIN. Certainly.

Mr. O'CONNELL. Why do you think that?

Mr. McLAUGHLIN. I think it is a logical relationship.

Mr. O'CONNELL. You do? It seems to me just the reverse. It would seem to me more logical to be concerned about conserving oil when we had less in sight.

Mr. McLAUGHLIN. Well, it is true what you are interested in, though, is the ratio between consumption and present use, and that is not the highest it has ever been. That is, we have had a longer supply available in terms of estimated years of consumption. That was true, for instance, shortly after the East Texas field was discovered, when I think we had something like probably 18 or 19 years' of supply in terms of the then annual consumption. Now it is less than that; it is somewhere around 14.

Mr. O'CONNELL. That was 15 years ago, before Seminole and East Texas.

Mr. WATKINS. Fifteen years ago we didn't know what we know today about the function of reservoir energy.

Mr. O'CONNELL. I understand that.

The CHAIRMAN. Mr. Stabler, do you recall what the predictions were from the Geological Survey as to the length of time it would take to exhaust the Nation's supply of oil when the first petroleum withdrawals were made?

Mr. STABLER. Senator, I don't think there was any prediction in those terms. There were estimates of the known reserves and statements as to the length of time at current consumption that those reserves or their equivalent might be used up, but no statement as to the time of exhaustion.

The CHAIRMAN. What was that statement, if you recall, approximately? In other words, what was the scientific belief at the time the first oil withdrawals were made as to the life of the Nation's reserves?

Mr. STABLER. Only a few years ahead. We could see a few years ahead and that was all, not as many as we can now.

The CHAIRMAN. We couldn't see more than 10 years ahead, could we, at that time, if that much?

Mr. STABLER. That is my recollection; less than 10 years.

The CHAIRMAN. And now we can see much farther ahead.

Mr. STABLER. Fifteen years, perhaps.

The CHAIRMAN. So the consumption has been tremendously increased.

Mr. WATKINS. I would like to say that 15 years is a relatively short period in the life of nations.

The CHAIRMAN. Oh, yes. The thought comes to my mind, not because of my personal view with respect to this, but because of the representations which are made, as to how long before science and other engineers, other sciences, may be able to develop a motor fuel, say, from corncocks that will be almost as cheap as gasoline.

Mr. WATKINS. If you read this publication "Energy Resources and National Policy" you will see the limitations.

The CHAIRMAN. I haven't read the whole publication yet, but there is that possibility, is there not, that there may be other sources from which society may derive its liquid fuel?

Mr. BALLINGER. You say that we have only about 14 years of reserves. You wouldn't make that as an exact statement, would you?

Mr. McLAUGHLIN. That is the present known reserve.

Mr. BALLINGER. Isn't it true that only about 3 percent of the land in the United States suspected of bearing oil has actually been investigated?

Mr. McLAUGHLIN. I think perhaps Mr. Stabler can answer that.

Mr. STABLER. I can't answer that question with any degree of assurance, but I am very sure it is more than 3 percent of prospective oil lands. Of course the area of prospective oil lands and the number of prospective fields, either areally or by depth, is decreasing day by day, so the opportunity for exploration is much less now than it was 10 or 15 years ago.

Mr. BALLINGER. When you make the estimate of 14 years do you take into account the oil control by citizens of the United States in Venezuela?

Mr. McLAUGHLIN. No.

Mr. BALLINGER. And other areas?

Mr. McLAUGHLIN. We might not be able to get that when we wanted it.

Mr. BALLINGER. But there are vast reserves there, aren't there?

Mr. McLAUGHLIN. Yes; but not as great as our reserves. We have by far the largest group of reserves in the world, proven reserves, definitely proven.

Mr. WATKINS. I think it ought to be made clear that Dr. McLaughlin's statement was that our present estimate of proven reserves is roughly 14 times our present annual consumption, not that he estimated that our present oil will be exhausted after 14 years.

Mr. McLAUGHLIN. Oh, certainly not.

The CHAIRMAN. Yes; I think that is quite clear.

Mr. SOYSTER. I think it should be realized also that you could not possibly produce that reserve in 14 years if you wanted to.

The CHAIRMAN. It is a reserve that once gone can never be replaced.

Mr. SOYSTER. It may take 30 or 40 years to get that last barrel.

The VICE CHAIRMAN. Anyhow, any oil we have got we have no more right to use—let me put it this way: The generation doesn't own any more of that oil than it has to use and conserve to prevent waste and hold for the next generation. There may be several generations after we are gone; you can't tell.

The CHAIRMAN. Of course, we are getting into philosophy now, which is merely a question to what a degree society may control the individual use of individually owned resources.

Mr. McLAUGHLIN. I will discuss now the extent of the adoption of unit operation. This method is invariably practiced in those countries where mineral rights are the property of the state or where concessions covering large areas are given to single operating companies. In the major fields of Iran (Persia) and Iraq unit operation is practiced by the foreign oil companies holding state concessions. It is also used in parts of Venezuela, where foreign oil companies hold large contiguous blocks of leases.

The advantage of compulsory unit operation is considered so great that England, in making provision for any possible oil field which may be discovered in Great Britain, has provided in the British Petroleum Regulations of May 15, 1935, for cooperation among lessees of one geological unit, to be effective at first voluntarily, failing which the Government, through the board of trade, has the power to require unit operation subject to the right to arbitration.

Voluntary unit operation has been practiced in the United States for many years, and particularly since about 1927, when a period of overproduction stimulated interest in unit control as a stabilization device. Perhaps as many as 30 pools or sections of pools are operated under some kind of unit management at the present time, but these make up a very small percentage of the total production.

Many of the more important unit schemes in the United States involve Federal land. One of the first major legislative moves in the direction of unit operation in the United States was the enactment by Congress of laws applying to lands belonging to the United States.

In a very restricted manner unit operation has been adopted and approved by the laws and regulations of Arkansas, Oklahoma, New Mexico, and Louisiana.

The VICE CHAIRMAN. May I ask a question, please? What percentage of the probable public land carrying oil is so related to private lands that they may be drained from wells on private lands? Or reverse it. I would like to ask it the other way around. How much of the public lands of the United States that has oil under it couldn't be drained by wells from private lands?

Mr. STABLER. It would be a very small percentage.

The VICE CHAIRMAN. That's the answer.

Mr. STABLER. However, in the unit plans that have been adopted for public lands, large areas of private lands have been included. Half of the production from Federal lands at the present time is developed under unit-operation agreements, combined with private lands.

The VICE CHAIRMAN. The point I have in mind is that if the Federal Government owns a considerable amount of ground that may produce oil, in these times of heavy private production it seems to me probably it ought not to be leased to anybody.

I didn't want to bring that question up, but it is something we can consider.

The CHAIRMAN. We can discuss that in the Public Lands Committee some time.

The VICE CHAIRMAN. Yes.

Mr. McLAUGHLIN. In a very restricted manner unit operation has been adopted and approved by the laws and regulations of Arkansas,

Oklahoma, New Mexico, and Louisiana, in the sense that pooling of mineral rights within well-spacing units can be required by the regulatory authorities of the States. The drilling district or proration unit seems to be a step in the direction of compulsory unit operation of the entire pool. All that seems to be necessary is that the State require that the wells in adjoining drilling districts be operated according to standard regulations and that some method be found of compensating the owners of the gas cap.

Unit operation of oil and gas pools has been widely recommended by geologists and engineers, oil producers, lawyers, economists, and Government regulatory bodies; and in most of these instances compulsory unitization was recommended.

Among petroleum geologists and engineers, perhaps one of the most significant recommendations of unit operation is that of H. C. Miller and Ben E. Lindsly, of the United States Bureau of Mines, made before the Cole Committee in the petroleum investigation in 1934,¹ that in their opinion, unit operation presented no insuperable problems.

Representative WILLIAMS. Right there, in connection with this compulsory unit operation, what formula has been worked out by which there is an equitable distribution of the withdrawals?

Mr. McLAUGHLIN. Well, there is some——

Representative WILLIAMS (interposing). How can they determine what each one of the different owners is entitled to?

Mr. McLAUGHLIN. There is some dispute among engineers as to the accuracy with which oil in place can be estimated. Mr. Lindsly and Mr. Miller feel that it can be done with sufficient accuracy to serve as a basis for division of the pool. After all, all you have to determine is the ratio, not the total amount in the reservoir.

Mr. WATKINS. May I ask whether the unrestricted rule of capture operates to the equitable distribution of the oil in a given pool?

The CHAIRMAN. I assume that Mr. Stabler will have something to say about the experience of the Government in unit operation.

Mr. STABLER. If you so desire.

The CHAIRMAN. It is a matter of much interest, as the questions indicate. Proceed, Doctor.

Mr. McLAUGHLIN. The greatest achievements of unit operations are, of course, those in Persia and Iraq. The fields in those countries have produced a much larger percentage of oil by natural means: that is, by use of reservoir energy, and have been characterized by costs considerably less than those in the United States.

Earl Oliver and J. P. Umpleby, petroleum engineers, further state that the greater part of foreign oil is produced from large blocks with the competitive feature either absent or very materially reduced, whereas most American oil is produced under competitive conditions of waste and high cost. The greater advantage of unit control is illustrated by the operation of the Anglo-Iranian Oil Co., of the Temple of Solomon field in Persia. From February 1929 to the end of 1932, according to Sir John Cadman, chairman of the board of the Anglo-Iranian Oil Co., no well in that field—

has ceased natural flow on account of declining pressure or of diminished drainage from the reservoir rock. No well has been taken off production on

¹ A subcommittee of the House of Representatives Committee on Interstate and Foreign Commerce, pursuant to H. R. 441, 73d Cong., 2d sess.

account of edge water encroachment, nor indeed has edge water been produced in any production well. A certain number of wells have gone to gas and been closed in, but this is strictly in accordance with our system of operation. The dates on which such wells have gone to gas have corresponded closely with estimates existing four years ago, and replacement wells have, where necessary, been methodically completed in advance of these dates. The pressure in the gas dome of the Masjid-i-Sulaiman field has dropped only five pounds per square inch, approximately one percent, during the past four years, although a production of nearly 20,000,000 tons has been drawn from the field during that period.

Sir John Cadman has attributed these achievements largely to unit operation, supported by adequate engineering standards.

The average production per well in the Kirkuk field in Iraq and in the Haft Kell field in Iran, Persia, in 1935 was nearly 50 times the average production per well during conditions of peak production in 1933 in East Texas. More than 20,000 wells in East Texas were used to obtain a production of 205,000,000 barrels in 1933, whereas in the Kirkuk field 45 wells were sufficient to produce 27,000,000 barrels of oil in 1935, and in the Haft Kell field 40 wells were sufficient to produce 27,000,000 barrels in the same year.

Significant achievements of unit operation in the United States have been made in the Kettleman Hills field in the San Joaquin Valley in California, in the Belvedere Gardens and Dominguez Hills fields in southern California, in the Van, Yates, and Sugarland fields in Texas, the Hobbs field in New Mexico, and the South Burbank and other Osage County fields in Oklahoma. The difference in costs of production between fields developed cooperatively and those developed competitively is impressive. Kettleman Hills is not an example of thoroughly successful unit operation, mainly because unitization was not complete. The small noncooperative outside interests caused much unnecessary waste; practices existed which would not have occurred under full unit operation. On the other hand, partial unitization made it possible to avoid many wasteful methods. It was not by accident that the lowest operating costs among California fields, in 1931 to 1934, were those for Kettleman Hills, and the next lowest those for Dominguez.

Now I wish to suggest some other possible conservation proposals. First, the requirement of minimum engineering standards, even without unit operation.

If regulation is to be continued mainly on the basis of proration, that is, production control, important gains in conservation may not be achieved unless proration efforts include improved rules and regulations concerning the ways in which oil and gas fields are to be operated. Production restriction creates the opportunity for conservation in that it tends to raise the market price of these natural resources. Minimum engineering standards are necessary to see that conservation is actually achieved.

These minimum engineering standards themselves, in the absence of laws and regulations providing for compulsory unit operation, can make a considerable improvement in the relative recovery of natural resources. One of the most complete sets of rules and regulations governing production and conservation of oil and gas is that established by the Oil Conservation Commission of New Mexico under the State laws. Arkansas and Louisiana also have thoroughgoing conservation laws, modeled in large part after the New Mexico law.

The cause of conservation can be doubly served by well-spacing regulations which vary with the nature of the reservoir. By restricting drilling, especially in proven areas, ultimate recovery can be increased and at the same time great savings in capital investment can be made.

Regulation of the rate of flow of oil and gas should be based in part upon the control of gas-oil ratios if maximum recovery is to be achieved. If production is too rapid, the gas in the structure is given off, and much of the oil can never be recovered even by methods of repressuring. Repressuring in any case probably cannot establish a solution of gas in oil as complete as that which originally existed in the reservoir. If unit operation is not feasible and the regulation of the industry must continue primarily on the basis of proration, well allowables should be determined by reference to maximum ultimate recovery and not according to marketing conditions based upon certain minimum production for existing wells.

The premature abandonment of producing wells because of changes in economic conditions may be restricted by regulatory measures. The problem of abandonment of marginal wells is likely to be severe either in periods of very low prices of crude oil or at time when new fields are being brought into production. When a flush field is opened, many producers will abandon wells in old fields as fast as they can and transfer their efforts to the new proven territory, where a greater return can be realized, often in a very short period of time.

Without unit operation, a partial solution of the problem of well abandonment could be made if regulatory bodies, State and Federal, were able to restrict flush production elsewhere, and particularly if they effectively limited the number of wells which could be drilled in new proven areas of potentially high initial production.

Regardless of whether unit operation is achievable or not, both oil and gas production need to be restricted by regulatory authorities approximately to current needs. The demand for oil is, of course, somewhat elastic, and consequently—

The CHAIRMAN (interposing). Did you say that the production ought to be regulated to current needs?

Mr. McLAUGHLIN. Yes.

The CHAIRMAN. That is a dogmatic statement of controlled production to meet demand?

Mr. McLAUGHLIN. Yes.

The CHAIRMAN. That is a dogmatic statement of controlled production to meet demand.

Mr. McLAUGHLIN. That's right.

The CHAIRMAN. And do you think price should be a factor in determining the program?

Mr. McLAUGHLIN. Yes; it is, as I am about to suggest. The demand for oil is partly elastic, and the amount you need would depend somewhat on the price, but the major products of crude oil probably are not very elastic. Consumption of gasoline seems to vary much more with general business conditions than with price, so it is only in part a price problem.

The CHAIRMAN. Well, is it possible to regulate production to an estimated demand without a thoroughgoing regulation all the way down the line in every factor of the industry?

Mr. McLAUGHLIN. I think so. That is more or less what we have now, in a haphazard spasmodic sort of way.

The CHAIRMAN. No; I don't think so, and neither did the Pennsylvania commission, which suggested regulating of the output.

Mr. McLAUGHLIN. I mean we do have now a kind of regulation of production of crude oil.

The CHAIRMAN. Well, not very complete. The State of Illinois is producing in Illinois without any limitation or control of any kind.

Mr. McLAUGHLIN. Quite so. I mean the major States—Texas, Oklahoma—

The CHAIRMAN (interposing). Yes; but when you have one hole in a dike the dike is weak.

Mr. McLAUGHLIN. That is quite right; and conservation practice would be greatly improved if we had adequate control.

The CHAIRMAN. You are giving us a scientific opinion in which you state that production should be restricted to demand. Now, that takes no cognizance of State lines or of any other factors that tend to work against the realization of this ideal that you have expressed.

Mr. McLAUGHLIN. It is an exceedingly complicated problem. There have to be adjustments made for exports and imports, but it should be limited, in my opinion, to something like current demand.

The CHAIRMAN. All right. So I am saying to you, can you regulate production to current demand without adopting similar regulations all the way down the line in the whole industry?

Mr. McLAUGHLIN. I think you can. I don't think that involves complete regulation. The price changes would more or less take care of themselves. Of course, I would certainly advocate adequate observation on the part of regulatory commissions as to what is going on.

The CHAIRMAN. If you restrict production of crude oil to the demand for petroleum products and you don't restrict the retail outlets, the inevitable result is that which has been described here by retailers, of their inability to make a living in selling gasoline.

Mr. McLAUGHLIN. I should think it would make it easier for them to make a better living. It would tend to raise the price margins.

Senator KING. You are not so much concerned, then, about the consumer?

Mr. McLAUGHLIN. I am taking for the minute the temporary point of view of the jobber. I wouldn't make that statement as too dogmatic a statement.

The CHAIRMAN. I didn't say it was too dogmatic. I don't object to your dogma. You can adopt that freely so far as I am concerned. I am merely trying to determine what your dogma is; that is all.

Senator KING. We are not very orthodox in considering this question.

Mr. McLAUGHLIN. I think we have to retain the present wisely adopted system of production restrictions; that is, proration is a system by which production is regulated indirectly to demand.

Senator KING. When you used the words "current demands" did you intend to include in that the demands from abroad, or exports, or just the domestic needs, because we are selling and perhaps may increase

our exports of oil and gasoline to foreign countries, and the demand may increase, and when you speak of current demands I suppose you include in that the legitimate current demands which may be made by exporters to meet demands from other countries.

Mr. McLAUGHLIN. Well, that is a problem of regulation; whether or not it would be worth while from the standpoint of national policy to restrict exports, that is a big problem, all right.

Senator KING. You are not advocating the restriction of the sale of oil or its finished products to Mexico or to Canada or to any country with which we have diplomatic relations and commercial relations?

Mr. McLAUGHLIN. All I was advocating there was that we shouldn't have excessive overproduction of crude oil. Five-cent crude oil is a bad thing from all points of view, conservation particularly.

Mr. O'CONNELL. When you were discussing proration as a means of bringing production in line with current demand, immediately following that you indicated that the demand for gasoline or petroleum products was to some extent elastic. Do you know whether any studies have ever been made or whether there is any accurate information available as to how elastic the demand for petroleum products is?

Mr. McLAUGHLIN. No. We know that there is a shift in the use from coal to fuel oil at certain price levels. That indicates a certain elasticity.

Mr. O'CONNELL. I take it you don't believe it is possible to ascertain current demand without taking price into consideration.

Mr. McLAUGHLIN. Yes.

Mr. O'CONNELL. So there is a rather imponderable, or at least little-known factor of the elasticity of demand which would be a very important factor to take into consideration in determining demands.

Mr. McLAUGHLIN. That is right. It isn't a matter of 100 percent accuracy.

Mr. BALLINGER. There are two conceptions of conservation, as I understand it here. One is that you should let the oil come out of your well at a rate so as to insure that a maximum amount of oil will be taken out of that well. To me that is the real meaning of conservation. The other meaning of conservation is that the rate at which that well flows shall only be such as to insure a profitable price to the industry. That is the real meaning of proration. If you establish scientific control a man ought to be able to take out as much oil as he pleases, no matter what the effect on price. Then you have scientific production of oil. I think those two concepts are totally at variance.

Mr. McLAUGHLIN. But you can either operate or not operate a well. You can either conserve by not operating a field at all or by operating it at the most efficient rate, and I would say it would be a violation of conservation when the price of oil would be such that it would seep down into all the so-called inferior uses. That is a matter of debate, of course.

Mr. BALLINGER. It would be disadvantageous for the oil industry, but it might be highly profitable for the industries buying from the oil industry.

Mr. McLAUGHLIN. And highly embarrassing to future generations wanting to use the oil for high-grade purposes.

Mr. BALLINGER. When you get to that you get to something so utterly imponderable that you are arguing completely in a vacuum. I don't see how you can come out with anything.

Mr. McLAUGHLIN. It is not an easy matter, I grant you, but it seems to me it is worth discussing.

Mr. SHAUGHNESSY. I want to be sure I understand your reply. Did you definitely disavow any relation between conservation and proration?

Mr. McLAUGHLIN. I say proration has certain conservation aspects.

Mr. SHAUGHNESSY. And they involve the restriction of the rate of production?

Mr. McLAUGHLIN. Yes; and also, as I will point out later on, the collection of much valuable information about the behavior of the reservoir and type of engineering practices that could be used under a thoroughgoing unit-operation plan.

Representative WILLIAMS. If the known supply of this oil that we have now were operated on strictly a conservation basis, on strict engineering principles so as to preserve that, that there might finally be the ultimate maximum amount of oil obtained, if it were operated purely on that basis, would we get as much oil as we are getting now?

Mr. McLAUGHLIN. Well, that is a difficult question to answer.

Representative WILLIAMS. In other words, would that operation furnish an adequate supply of oil at a reasonable price?

Mr. McLAUGHLIN. I should think so. It certainly ought to lower costs. Would you care to comment on that, Mr. Stabier?

Senator KING. Might you not strike out the word "lower" costs and insert "higher" costs with more accuracy?

Mr. McLAUGHLIN. No. Under a careful operating system, something like unit control, costs are going down. You need much less labor and much less capital, and you get much higher yields of production.

Representative WILLIAMS. Do you think we would get as much oil for the market as we have now?

Mr. McLAUGHLIN. I think so. I think the average output per well would increase enough so that with fewer wells you would get much more production: This case I just quoted in Persia, where you got, out of 45 wells, something like 25,000,000 barrels, whereas in East Texas it took something like 25,000 wells to get out 200,000,000 barrels.

Representative WILLIAMS. In other words, then, if we could get on a strictly engineering basis and a purely conservation basis and so operate them, we would not only conserve the oil, but we would also have an adequate supply at a fair price.

Mr. McLAUGHLIN. I see no engineers questioning the adequacy of production under a unit plan. I see no criticism of that sort.

Representative WILLIAMS. The question in my mind is as to whether or not, if that principle were put into operation, it would produce sufficient oil to supply the market demand at a fair and reasonable price.

Mr. McLAUGHLIN. I should think so. I should think costs would go down.

The CHAIRMAN. The labor costs would do down?

Mr. McLAUGHLIN. And capital costs, and yield per well would go up. If the engineers are able to help us at all, that would be the inevitable result.

The CHAIRMAN. And since one of the subjects of this committee's study is unemployment, what would you suggest we do with the people that are put out of employment?

Mr. McLAUGHLIN. That is a big economic problem.

Representative WILLIAMS. I don't quite understand your reasoning on that question, because there are a number of wells now that are not restricted in operation at all.

Mr. McLAUGHLIN. But their output is very low; very low.

Representative WILLIAMS. You have just cited Illinois, for instance, and there are several other States where we don't have any conservation laws at all, and in addition to the States where we do have a conservation law it seems to me under our present plan we would have more oil produced than under a conservation plan in every State.

Mr. McLAUGHLIN. We have production restrictions in practically every major State in the country. We have an informal plan in California; we don't have any kind of plan in Illinois.

The CHAIRMAN. Here are two illustrations. We had some testimony here a few days ago with respect to the condition of the petroleum industry in the State of Wyoming. The witness testified that there are 16 shut-in fields in Wyoming. Two of them are light oil, the others are black oil fields. But there are two light oil fields shut in; no development. The oil is there. There is no conservation law in the State of Wyoming.

In Illinois where, likewise, there is no conservation law, no unit plan, production is running wild.

Mr. McLAUGHLIN. Illinois is near the market, and Wyoming isn't.

The CHAIRMAN. Exactly. but how are you going to adopt a rule which will apply to these two different situations? The natural conditions with respect to transportation and distance from market restrict the production without a conservation law in one State, and the closeness to the market in the other State causes tremendous production of recently discovered fields.

Mr. McLAUGHLIN. The invokement of Federal authority is the only way, of course.

The CHAIRMAN. All right. That brings you down to exercising Federal authority over real property within a State, which, under our Constitution, is certainly not within the power of the Federal Government.

Mr. McLAUGHLIN. Well, you have an irreplaceable natural resource underneath that property. I think there surely ought to be possibilities of an attempt at Federal regulation.

The CHAIRMAN. Your thesis then is that there ought to be a Federal conservation law which would apply to this natural resource in every State and in all of the possessions of the United States, regardless of local conditions.

Mr. McLAUGHLIN. Certain minimum-required standards of behavior on the part of the oil producer.

The CHAIRMAN. That in turn would require the establishment of some sort of a supervisory authority in Washington to determine what the permissible activity should be.

Mr. McLAUGHLIN. Yes. I see no other way to control it.

Senator KING. We haven't got a Hitler here yet.

Representative WILLIAMS. Then I take it you are in favor of the Cole bill that has been introduced in the House. Are you familiar with that bill?

Mr. McLAUGHLIN. No; I am not familiar with it.

Representative WILLIAMS. I think that is exactly what that bill is. It provides for the creation of a Federal Conservation Board to look after the oil reserves just in the manner that you have specified in connection with States.

Mr. McLAUGHLIN. Yes.

Representative WILLIAMS. I just wanted to make that observation about the Cole bill, as I understand it.

Mr. WATKINS. I think it ought to be pointed out that the aim of our recommendations is to see that minimum engineering standards are applied to oil pools wherever they may be and that those geological structures are operated at their optimum rate in order to yield the greatest ultimate recovery.

Mr. McLAUGHLIN. Shall I go ahead or do you have time?

The CHAIRMAN. How much more do you have?

Mr. McLAUGHLIN. I have about two pages more.

The CHAIRMAN. It is now a quarter to five.

Mr. McLAUGHLIN. Perhaps I had better file this statement.

The CHAIRMAN. We don't want to shut you off. How much do you have, Mr. Stabler?

Mr. STABLER. I have no prepared statement at all, Senator.

The CHAIRMAN. Knowing you for a long time, I know that you don't need any.

I directed a question to Dr. Cattell with respect to the estimates of production from the Bureau of Mines, and it seems to me that that is a matter of real importance in the consideration of this question. Mr. McConnell, I wonder how it would be if we should take a recess now until tomorrow morning at 10 o'clock and ask Mr. Stabler to appear at that time, and ask that Mr. White, is it, of the Bureau of Mines?

Mr. CATTELL. Mr. White is in charge of the division that handles the statistical work.

The CHAIRMAN. He would be available to come to discuss that phase of the question, which is a very important phase, would he not?

Mr. CATTELL. I presume that he is in Washington; I am not sure.

The CHAIRMAN. I wonder, Mr. Watkins, if you would make it your business to ask Mr. White or somebody who can speak for him.

Mr. WATKINS. Mr. Chairman, I wonder if Mr. McLaughlin could finish. He needs about 5 minutes, and he is due back in New York in the morning.

The CHAIRMAN. Yes; I intended that he should finish these 2 pages.

Mr. McLAUGHLIN. Therefore, a restriction of production to current needs inevitably assumes the maintenance of desirable prices or, at least, the restriction of price fluctuations within certain desirable limits.

Restriction of production will tend to raise the price. In times of depressed conditions, such as existed in 1930 to 1932, an increase in price may be justified socially if it operates as it might under favorable conditions of regulation to restrict waste. Under such circumstances it appears socially desirable that producing companies operate at a profit rather than at a loss. Both economists and jurists have held that unless production, particularly from a flush pool, is limited to something like market demand; waste cannot be prevented nor can the correlative rights of the owners of land over the pool be

protected. The principle of ratable takings is a firmly established law. Under the restricted flow imposed by proration, producers have gained more technical knowledge concerning the utilization of reservoir energy, and grossly wasteful production practices have been greatly restricted. Thus, proration has helped to promote conservation.

Although it has been held that proration offsets the old rule of capture, the enemy of conservation, it may nevertheless lead to other undesirable operating practices, such as unnecessary drilling and overdevelopment of pools, resulting in well allowables too small to permit an efficient rate of flow.

If you restrict production, the oil companies would simply put down more wells and get their total volume out of more wells instead of fewer wells unless there is adequate well-spacing provision.

Economists are agreed that of itself proration does not mean conservation and that, as a matter of fact, the results are likely to be to the contrary. Yet proration, even as a strict stabilization measure, means avoidance of wasteful storage and protection of reserves of marginal wells. Moreover, proration procedure has improved greatly in recent years.

The fundamental problem of State quotas is whether they are to be related to the best conservation of reserves or whether they are to reflect merely existing competitive market trends and priority of development, amongst States, for instance, as between Illinois and Wyoming. In order that production restriction be equitable and judged insofar as possible on a national basis, Federal authority will be required. Such authority could prevent a recurrent break-down of production restriction caused by conflicting interests among the States or by the discovery of important fields in States having no proration laws, particularly as they happen to be as Illinois is, near the market, and as Michigan is.

Insofar as possible, allowables should be based on acreage content; that is, on estimated oil in place and not on any minimum allowable per well. In a situation such as that in East Texas, where 98 percent of the district allowables are used in the minimum proration per well according to the Marginal Well Act, there is clearly little possibility of basing proration on acreage content or on efficient rate of production. Although the Federal courts have declared that the allowable for a good well must be higher than that for a poor one, the Marginal Well Act has forced the railroad commission to deal with over three-fourths of the State's allowable on a basis which ignores any distinction between reservoir conditions or more efficient rates of production. Insofar as proration is consistent with conservation, its goal should be the maintenance of uniform reservoir pressures, and the allowable per well should be readjusted upon the basis of careful measures of comparative pressure declines. Some States try to follow this procedure. If not accompanied by unit operation, proration should be based upon pool allowables and not upon well allowables.

The CHAIRMAN. Are there any questions now to be directed to Dr. McLaughlin?

Mr. O'CONNELL. I should like to address one to him. I understood you to say in the last few moments that one of the functions of proration which tied it in with conservation was to keep so-called marginal wells in production; is that correct?

Mr. McLAUGHLIN. Yes.

Mr. O'CONNELL. I take it that is the function of the price angle to proration.

Mr. McLAUGHLIN. That is right; not to have severely depressed prices.

Mr. O'CONNELL. Has that any real connection with conservation?

Mr. McLAUGHLIN. Yes; because if these marginal wells are closed down for a period of time, many of them cannot be reopened, the casing will collapse, and the resource will be totally lost.

Mr. O'CONNELL. Is that apt to be so for any substantial part of the so-called marginal wells? We had a small amount of testimony before the committee along that line a week or two back, and, while the witness wasn't particularly definite on the subject, he seemed to be of the opinion that if a so-called stripper well had to be shut down because it was a submarginal producer and on the price basis was unable to stay in production, that at a future date it would be entirely possible to recover the oil in the ground if the price structure of itself, through the forces of supply and demand, came around to the point that it was less than submarginal. You don't quite agree with that?

Mr. McLAUGHLIN. Do you know what field he was referring to?

Mr. O'CONNELL. He was speaking generally. He was a technical man.

Mr. McLAUGHLIN. I think it would depend on the depth of the well, the type of reservoir, the type of well, whether it was cemented in a certain way. As to the percentage, I don't know. Do any of you men have any guesses?

Mr. O'CONNELL. As I recall, it was Colonel Thompson. He was discussing proration.

Mr. McLAUGHLIN. Dr. Katherine Carman, of the Petroleum Division, in the Cole Committee testimony in 1934, stated that a very considerable number of wells might not be able to be reopened after being closed for a period of 6 months or so.

Mr. O'CONNELL. At least it is clear that it is your view that a substantial part of the function of proration is to keep wells which would otherwise be submarginal in production.

Mr. McLAUGHLIN. Yes; that is right.

Mr. O'CONNELL. And to do that, I take it, means it is definitely for the purpose of bringing about needed price increases for the crude petroleum, crude oil.

Mr. McLAUGHLIN. Yes. I am referring, of course, to severely depressed prices, such as you had in 1932, and such as you get whenever a large flush pool comes into production and the crude-oil price goes to 5 or 10 cents a barrel.

The CHAIRMAN. What is the comparative cost of developing or producing oil from a stripper well and from a flowing well?

Mr. McLAUGHLIN. Oh, I am not familiar with costs. A stripper well would be, I should say, several times the cost of running a flowing well.

The CHAIRMAN. So that if you were to operate a conservation program for the purpose of making it profitable to operate the submarginal wells, you would by that very fact increase the profits of the owners of the flowing wells, would you not?

Mr. McLAUGHLIN. That is right. It might be better for the Government to get that back in extra taxes rather than face the problem of losing this irreplaceable resource, I mean if the Government feels it is an excessive profit.

The CHAIRMAN. That is another very delicate question of taxes and I don't think we will go into that this evening.

Mr. McCONNELL. Did you mean to say that the English are producing 50 times as much oil from one well in Iraq—was that where it was?

Mr. McLAUGHLIN. Also in Iran.

Mr. McCONNELL. Than we are getting from our average well under like conditions?

Mr. McLAUGHLIN. Roughly similar conditions; yes.

Mr. McCONNELL. Have you any idea of what the waste of oil is, what we are losing in unrecoverable oil by that competitive drilling that you mentioned in east Texas as compared with what the English will get out of an Iraq pool?

Mr. McLAUGHLIN. Not very accurately. I would guess the recovery would be about twice as great in Iraq as in east Texas.

Mr. McCONNELL. Do you think this estimate Dr. Watkins made on the unrecoverable oil we have found and gone by, by this offsetting drilling of 600,000,000 barrels a year, is too high or too low?

Mr. WATKINS. May I remind you that that estimate was in terms of certain assumptions. I pointed out that we were dealing with the realm of conjecture.

Mr. McCONNELL. That was the assumption they would increase the recoverable possibilities from 30 to 45 percent.

Mr. McLAUGHLIN. Yes; I should think that would be right.

Mr. McCONNELL. That 600,000-barrel figure you think probably is not too exaggerated?

Mr. McLAUGHLIN. If we were operating all of our wells at maximum efficiency; yes.

Mr. McCONNELL. Do you think that excess drilling in this country every year, drilling that is unnecessary, would amount to as much as \$500,000,000, a half a billion dollars?

Mr. McLAUGHLIN. Yes; if you compare it with an ideal situation such as you would have under unit operation; if you compare it with the Iraq system.

Mr. McCONNELL. From a geological standpoint there is no difference between Iraq and the pools in a good many of the States here?

Mr. McLAUGHLIN. There are all kinds of pools. The East Texas pool isn't the same kind of pool as Iraq. It is more of a water drive.

Mr. McCONNELL. But that is due primarily to excess drilling.

Mr. McLAUGHLIN. Yes. There is some difference among geologists as to the desirable density of wells, but under the unit operation plan, you put down the first generation of wells and then if the reservoir conditions you learn about indicate you need more wells you could put them down instead of putting down an excessive number to begin with.

The CHAIRMAN. If there are no more questions—

The VICE CHAIRMAN (interposing). I would like to ask one question. Do you mean by your answer a moment ago you leave from

40 to 50 percent of the oil permanently in the ground unless you resort to some method the engineers are not now using?

Mr. McLAUGHLIN. Yes; unless you are able to put into effect different methods.

Mr. McCONNELL. This unitized operation is not a theory, it is in practice by foreigners who are competing with our production, is it not?

Mr. McLAUGHLIN. Yes; and it is used in this country. There are even cases in this country where oil companies have got together and cooperated within a given field, in which they held separate bases scattered about in a patch-work system.

Mr. McCONNELL. Very few places?

Mr. McLAUGHLIN. Very few places.

The VICE CHAIRMAN. How do you know, if I may ask you, with reference to the accuracy of your answer a moment ago that we are leaving permanently, insofar as present engineering methods are concerned, 40 to 50 percent of the oil in the ground?

Mr. McLAUGHLIN. I am depending there principally on the estimates of Mr. H. C. Miller of the Bureau of Mines in that testimony of 1934 before the Cole Committee, in which he showed the difference between the average recovery of companies, the actual practice and the estimated recovery under the use of the best known methods. He said that the existing recovery then was something like 20 to 35 percent, whereas if best current practice were put into effect, it would be something like 60 percent.

The VICE CHAIRMAN. By what process, have they tested fields sufficiently or is that the theory of an engineer, who of course bases his conclusion on what he knows generally?

Mr. McLAUGHLIN. The engineers among themselves seem to agree pretty well on estimates of given fields. Estimates have been made of the total amount of oil.

The VICE CHAIRMAN. That is a tremendously important fact, if the country is convinced of the accuracy of that conclusion.

Mr. WATKINS. I think Mr. Soyster might say something on that point.

(Representative Sumners assumed the Chair.)

Senator KING. Could I ask you just one question? You have seen Signal Hill, have you not, near Los Angeles?

Mr. McLAUGHLIN. No; I haven't, but I know about it.

Senator KING. Where there are scores, if not hundreds, of wells, some of them within 40, 50, feet of each other. Some of them have gone to very great depth. Would you venture the assertion that in Signal Hill, if they have ceased operation—and they have not—that they have not gotten all of the oil out?

Mr. McLAUGHLIN. Certainly.

Senator KING. They have not?

Mr. McLAUGHLIN. That is right. Even if it were the very best kind of operating conditions, you don't get a high percentage of recovery. The oil tends to cling to the sand; you just can't shake it loose.

Senator KING. But that which it was practical to obtain—do you mean to say they have not practically exhausted the field?

Mr. McLAUGHLIN. I mean to say with unit operation of the field you have got a somewhat higher return; yes.

Senator KING. If you have a large number of wells, just a few feet apart, doesn't that tend to drain the larger area than if you had only a few wells?

Mr. McLAUGHLIN. It depends somewhat on the nature of the sand. I am not familiar with that field. Perhaps Mr. Soyster is. Do you know the field?

Mr. SOYSTER. I worked down there a while.

Mr. McLAUGHLIN. Would you say the recovery would have been increased under the unit-operation scheme?

Mr. SOYSTER. I would say that the recovery of oil in Signal Hill—this is an offhand opinion—had the field been unitized and developed systematically, you might not have had as many barrels of oil recorded to date as have actually been produced, but over the entire life of the field I think that the field would produce more oil than it would as it is.

Mr. McCONNELL. How much more, a little more or twice as much?

Mr. SOYSTER. No; I wouldn't say twice as much. I wouldn't hazard such a guess as that.

Mr. McCONNELL. It would be a large increased production?

Mr. SOYSTER. It would be my rough guess that possibly 50 percent of the oil has been recovered from that field up to the present, maybe more than that, because of the fact in the first place that it is a rather light oil, that is the gravity is relatively high, the sand is a rather porous, permeable sand, it isn't tightly cemented and the migration of oil and water through the formation meets less resistance, there is less friction than you would have in a more tightly cemented sand.

Senator KING. That would make, would it not, for a larger flow, where there was a large number of wells just a few feet apart, than if you had only one well in a given area.

Mr. SOYSTER. That is true. Of course, you can take any sort of a reservoir, one of these carbonated water bottles, for instance. If you had a dozen tubes in there and opened all of those at once, the exhaustion is going to be much more rapid. If you dissipate the energy that is behind the fluid, if you produce a greater percentage of gas per barrel of oil then you have reduced the flowing life of that field and increased ultimately the cost per barrel of oil to be produced over the whole life of the field.

Senator KING. I wasn't speaking about cost. I was assuming that—take the table in front of you. Supposing that that is 1 acre of ground there and you drill 1 well in the center, and on another acre of similar constituents you drill 40 or 50 holes, perhaps 10, 20 feet apart; it would seem to me, from the law of hydrostatics or gravity or anything else that you would perhaps drain a larger amount with your 40 or 50 wells in that acre than if you only had 1 well in the center.

Mr. SOYSTER. I think time is the element of that answer, because if you have one well and the porosity and permeability of the reservoir were uniform or homogeneous, why wouldn't you get all of the oil out of that well eventually? It is true enough you wouldn't get it in the same period of time.

Senator KING. There is, of course, this possibility.

Mr. SOYSTER. We know also that these sands are not homogeneous, that they are not entirely uniform, and, of course, that is the reason

why, after experimentation and drilling so many wells in a field, you are able to determine whether 1 well to 20 acres or 1 well to 40 acres or some other spacing basis is the proper spacing basis for the greatest ultimate recovery of oil.

Senator KING. Well, the time element is a factor.

Mr. SOYSTER. Absolutely.

Mr. McLAUGHLIN. But you might well get more out of one well than out of a dozen eventually.

Senator KING. If you want to obtain the last drop of oil, so to speak.

The VICE CHAIRMAN. I asked a question of the gentleman. How do you know that you are leaving this oil in the ground? Do you make some tests with some cores?

Mr. SOYSTER. They take samples of the formation, actual core samples which are cut from the formation and you determine the porosity, in other words the space or voids in that particular sand, and, of course, you must assume that—

The VICE CHAIRMAN (interposing). Do you analyze that sand to see how much oil is left in it?

Mr. SOYSTER. Certainly, that can be done. You can determine, for instance, the amount or percentage of oil in a sand at any stage of the game so far as that is concerned.

The VICE CHAIRMAN. What I am trying to find out is after the period of commercial production has passed for a well, then the engineers are going to determine this thing that you have been testifying to, to ascertain from some core or some sample taken from down in the sand as to how much oil is left?

Mr. SOYSTER. Let me put it this way. If you ascertain the total volumetric capacity of the reservoir on the basis of the porosity of the sand, you know that it can hold—whether it does or not is something else—so many barrels of oil or water. Now, after you determine the productive limits of that field by drilling a well, say on two, three, or four sides of that structure, you can estimate the volume of oil in that reservoir at that time. Then, of course, as you recover the oil you know how much you have produced and if you have only gotten out 50 percent of it at least presumptively there is 50 percent of it left there.

The VICE CHAIRMAN. How do you know that there wouldn't have been a good deal of oil left there if you had had fewer wells?

Mr. SOYSTER. Well, when it comes right down to it I don't see that the wells make any difference about the amount of oil left there. It is a question of the rate of production, just as I said—

The VICE CHAIRMAN (interposing). Pardon me. I thought you were contending that if you had few wells you would get more ultimate production from the field.

Mr. SOYSTER. The only reason that I would contend that is because with fewer wells you have fewer avenues of waste or escape.—In other words, you don't have 40 or 50 wells from which you can have gas blowing into the air, being produced at an inefficient gas-oil ratio. Consequently, there would be a greater volume of gas wasted to the air during a given period of time.

The VICE CHAIRMAN. You take out more oil.

Mr. SOYSTER. Yes; but in the other event, if you produced your fewer wells more efficiently at their maximum efficient rate—that is,

the least amount of gas possible per barrel of oil—you would probably use up less energy of the gas—that is, reservoir energy and gas energy—in producing an equivalent amount of oil. Now it is conceivable, of course, that maybe you might with all your wells, if they were held down to their most efficient rate, maybe in some case you might possibly have a comparable gas-oil ratio; that is, with the number of wells.

The VICE CHAIRMAN. You choke each one down?

Mr. SOYSTER. Yes; and prevent that waste of gas, but there is a certain limitation on that. You can't possibly, in some cases, do that because, if you have a property on top of the structure where you are close to the gas cap, that well may blow a large volume of gas and a very small amount of oil; but if that landowner's property line runs along there, what is he going to do? Is he going to sit by and just take gas and let the other fellow drain his oil, or what? Of course, in the old days they used just to open them up wide and go up in the air. Gas wasn't worth anything anyway, and the sooner it blew in the oil the better, but they have realized the value of gas now in respect to its function as a medium of production or aiding in production.

The VICE CHAIRMAN. Suppose in that field where you have the unit production you sunk your wells on top of that gas cap, would you have some sort of way to get rid of that gas before the oil would begin to come up?

Mr. SOYSTER. No; if you do that, you are simply defeating the purpose of the whole plan, because you are letting out the force which would lift that oil. You are dissipating the very energy that—

The VICE CHAIRMAN (interposing). The gas is on top of the oil. How could it get down under to push it up?

Mr. SOYSTER. As I said, it is like a vacuum bottle. That tube in there goes down to the bottom of the liquid, doesn't it, in the bottle, and if you open the valve a differential in pressure is created due to the difference in pressure inside and outside the bottle; the gas reacts on the top of that fluid and forces it down into the reservoir and up the tube.

The VICE CHAIRMAN. Why wouldn't the man who happens to own the land, own that gas cap, put his tube down?

Mr. SOYSTER. He may not be able to get into the oil. The oil may be clear out beyond the property lines of his property. It may be all gas clear through the productive horizon at that point.

The VICE CHAIRMAN. That is what I was asking a moment ago. Suppose a well is put down to blow out this oil, and under community ownership you get down under that gas cap.

Mr. SOYSTER. Under community ownership that doesn't make any difference, because each one participates in the ratio that his property bears to the total productive area.

The VICE CHAIRMAN. If that well is owned by just one man or all of them it wouldn't seem to me that the well would know whether it was owned by all of them or not.

Mr. SOYSTER. You are correct, it wouldn't make any difference. That is the whole point in such a case, if you are to get the maximum value out of the energy that is in the reservoir you must keep it there to produce the oil from whatever wells are actually capable of producing oil. If it happens that the gas cap occupies an area of the

field on which there is one property owned by an individual or by one company, and they can't get any oil there, if they should go in and let that gas go to the air they are getting no oil recovery and at the same time they are injuring the field as a whole and preventing maximum ultimate recovery and recovery at a lower cost so far as the oil-producing areas of that structure are concerned.

The VICE CHAIRMAN. Thank you very much.

Are there any more questions?

Mr. McCONNELL. Mr. McLaughlin, do you think that if the tariff were taken off imports of oil, oil products, in this country there would be a much larger volume coming from these unitized English fields and from Venezuela than at present?

Mr. McLAUGHLIN. That is a guess. I presume there would be more oil coming from Venezuela; yes.

Mr. McCONNELL. It is much cheaper for them to produce oil than it is for us?

Mr. McLAUGHLIN. It has been stated that the cost of production under a unitized system is much less than under a highly competitive system.

Mr. McCONNELL. Under like conditions how much less? Would it be 10 percent less, or a half?

Mr. McLAUGHLIN. As between East Texas, where you have 20,000 wells producing 200,000,000 barrels and the Kirkuk field—

Mr. McCONNELL (interposing). That is an English field?

Mr. McLAUGHLIN. The Anglo-Iranian Oil Co., with 45 wells producing 27,000,000 barrels, you must have a terrific difference in cost of production.

Mr. McCONNELL. You think it might be one-fiftieth of the cost of the East Texas?

Mr. McLAUGHLIN. I wouldn't say that.

Mr. McCONNELL. It would be a small part of the cost of the East Texas production?

Mr. McLAUGHLIN. I don't know. I haven't seen any cost figures.

Mr. McCONNELL. It might be less than half?

Mr. McLAUGHLIN. Yes; I should think so. It depends on your lease cost and royalty expenses.

Mr. BALLINGER. In the interest of effective conservation, would you be willing to limit the use of oil? That is another way we might conserve. For instance, would it be a good thing to say that every automobile owner should only have so much oil or gas per week, or something of that kind?

Mr. McLAUGHLIN. I wouldn't start in there. I think if I were going into that sort of program I would start in places where you would have high-grade oil being used for purposes for which we could use coal, a resource of which we have much larger quantities.

Mr. BALLINGER. You wouldn't limit the use of oil, but you would be willing to control the production so an artificial price would be arrived at to automatically limit its use?

Mr. McLAUGHLIN. Yes.

Mr. BALLINGER. There is an inconsistency there. If you want people to use as much oil as possible, why don't you make the price right so they can use as much as possible?

Mr. McLAUGHLIN. I don't want them to use as much as possible.

Mr. BALLINGER. Then you should be against their driving down Mount Vernon Boulevard and using up the oil supply of the Nation.

Mr. McLAUGHLIN. I would say that was a superior use.

The VICE CHAIRMAN. We shall stand in recess until 10 o'clock in the morning.

(Whereupon, at 5:15 p. m., a recess was taken until 10 a. m., on Friday, October 20, 1939.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

FRIDAY, OCTOBER 20, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The Committee met at 10:20 a. m., pursuant to adjournment on Thursday, October 19, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman); Representative Sumners (vice chairman); Senator King; Representative Williams; Messrs. Berge, Henderson and Brackett.

Present also: Senator Green (Rhode Island); Representative Mapes (Michigan); Clarence Avildsen and Robert McConnell, representing the Department of Commerce; Willis Ballinger, representing the Federal Trade Commission; Quinn Shaughnessy, representing the Securities and Exchange Commission; W. B. Watson Snyder, Hugh Cox, F. E. Berquist and Christopher Del Sesto, Special Assistants to the Attorney General; Leo Finn and Roy C. Cook, Department of Justice.

Vice Chairman SUMNERS. The Committee will come to order.

The CHAIRMAN. I think Mr. Stabler is the first witness this morning. You completed with Dr. McLaughlin last evening, didn't you? You finished with Dr. McLaughlin.

Mr. Stabler, please.

TESTIMONY OF HERMAN STABLER, CHIEF OF THE CONSERVATION BRANCH, UNITED STATES GEOLOGICAL SURVEY; RALPH J. WATKINS, ECONOMIC ADVISER, NATIONAL RESOURCES PLANNING BOARD; HALE B. SOYSTER, CHIEF OF THE OIL AND GAS LEASING DIVISION OF THE CONSERVATION BRANCH, UNITED STATES GEOLOGICAL SURVEY; ROSCOE A. CATTELL, CHIEF ENGINEER, PETROLEUM AND NATURAL GAS DIVISION OF THE TECHNOLOGIC BRANCH, UNITED STATES BUREAU OF MINES; WASHINGTON, D. C.—Resumed

Mr. STABLER. My name is Herman Stabler. I am Chief of the Conservation Branch of the Geological Survey, a position that I have held for somewhat more than 14 years. Prior to that, for more than 20 years I had been engaged in various public-land activities of the Department of the Interior, either in the Geological Survey or the Reclamation Service.

The Conservation Branch of the Geological Survey, I may explain, deals almost wholly with public land matters:

First, the classification of the public lands. That is a job that involves the taking of an inventory of the natural resources of those lands; and second, the engineering supervision of those lands that are under lease or permit or license for minerals or for power.

STEPS TAKEN BY DEPARTMENT OF THE INTERIOR TOWARD CONSERVATION

Mr. STABLER. In my testimony, if it is agreeable to the committee, I will first run very briefly over the steps that have been taken in the Department toward the conservation of oil and gas, leading up to the two principal means of accomplishing conservation that are current, one of which is unit operation, which, judging from the interest of the committee yesterday, will be discussed at somewhat more length.

The first step taken in the Department toward the conservation of oil and gas was in 1865, just 6 years after the discovery of the famous Drake well that ushered in the first period of overproduction and surplus of oil in this country.

In 1865 oil was discovered on public land in California. The Commissioner of the General Land Office held that it was the policy of the Government not to treat these oil and gas lands as ordinary public lands and that they be withheld from disposition. The following year, 1866, the basic mining law of the United States was passed. Under that law, although it didn't mention, I believe, any specific mineral, it certainly didn't mention oil and gas specifically, it was held that the public lands should be disposed of, that is the oil and gas lands should be disposed of.

That law had no conservation provisions in it, but it remained the Federal oil and gas law for a great many years.

In 1891 the first act authorizing the leasing for mining purposes of Indian lands was passed. Parenthetically, I may say that the Conservation Branch, in addition to working on public lands, acts as a service organization for the Office of Indian Affairs and for the Navy Department in the supervision of oil and gas operations on their lands also.

That act of 1891 and subsequent Indian leasing acts contained no provisions looking toward conservation of the resources. It was not until 1897 that a Federal public land law specifically recognized oil and gas. That was an amendment to the basic mining law which recognized what were termed oil and gas placers, and that remained the Federal law as to oil and gas until 1920.

That act of 1897 also contained no conservation provisions. It became apparent that this old mining law was a very unsatisfactory act under which to dispose of oil and gas lands. The sentiment for the withholding of title to oil and gas lands in public ownership and leasing them for development grew until in 1909 quite a new policy was established. Beginning in that year an attempt was made to withdraw from disposition under the mining law the oil and gas lands owned by the United States. This marked the real beginning of Federal oil and gas conservation.

NAVAL OIL RESERVES

Mr. STABLER. I should perhaps mention in connection with that policy the withdrawal of naval reserves, three of them, two in 1912 and one in 1913, two in California and one in Wyoming, it being thought at that time that the Navy should have a reserve of oil to be available when other sources were depleted.

The CHAIRMAN. What has happened to those reserves?

Mr. STABLER. That is quite a story, Senator, but I think I can touch on it briefly. Naval reserve No. 1, containing several hundred million barrels of oil, is maintained as a reserve, not perfect, there are some private lands operated on one edge of it, some private holdings through the middle of it. It would be highly desirable, if I may properly express such an opinion, to perfect that reserve and make it a real hundred percent Government reserve of oil.

The CHAIRMAN. Do you know what the rate of production from the private lands is in this naval reserve No. 1?

Mr. STABLER. Now it is quite small. I can't state offhand how much is produced, but it is a rather small amount of oil.

The CHAIRMAN. What do you mean by a small amount of oil?

Mr. STABLER. I will have to guess at that because I have simply an impression. I would say possibly 10,000 barrels a day.

The CHAIRMAN. And over how long a period has that operation been continuing?

Mr. STABLER. That was begun, I think, somewhere between 1910 and 1915. The amount produced was very much greater back in those early years, and has continued in some amount ever since, but it is confined to the east end of the field.

The CHAIRMAN. What year did you say it began?

Mr. STABLER. Between '10 and '15, I can't state exactly the year. The reservation was made September 2, 1912, and it was just about that time that production started.

The CHAIRMAN. So this reserve has been draining through private lands for about 25 years?

Mr. STABLER. That is right.

The CHAIRMAN. And the production years ago was much greater than it is now, and it now happens it is about 10,000 barrels a day?

Mr. STABLER. I guess that it is.¹

The CHAIRMAN. That was your impression. Do you know who the operator is?

Mr. STABLER. The principal operator on private lands is the Standard Oil Co. of California.

Representative WILLIAMS. What is your plan to make that 100 percent naval reserve?

Mr. STABLER. That is a plan of the Navy Department, and I am under the impression that Congress recently gave the Navy Department authority to acquire these private lands under some means and make it a perfect reserve.

¹Mr. Stabler subsequently supplied the following information: Production in 1939 from the Elk Hills field, including Naval Reserve No. 1, was at the rate of about 10,500 barrels a day, 5,000 barrels being produced from patented lands and 5,500 barrels from land of the United States. Total production to the end of 1939 amounted to about 150,000,000 barrels.

Representative WILLIAMS. That would necessarily imply the right of eminent domain, wouldn't it, unless you could bargain with the private owners?

Mr. STABLER. I would think so.

The VICE CHAIRMAN. May I ask you a question in that connection? We have some testimony here that engineers can ascertain with fair workable accuracy the amount of oil in a given field under a given territory, a given acreage. Is that correct?

Mr. STABLER. If they have a reasonable amount of information on which to base their estimates, yes. They would need, of course, some information on the thickness of the sand and its porosity, and the limits of the productive area.

The VICE CHAIRMAN. Do you know whether or not, according to the determination of engineers, information to be had, this company has already drained its proportionate share of the oil from that general field?

Mr. STABLER. I would be inclined to say that it has drained the major part of its proportionate share, but probably not the whole amount that underlay the land, or even 60 percent of it, which we would say would be a fairly large proportion.

The VICE CHAIRMAN. I am speaking now of the recoverable oil.

Mr. STABLER. Recoverable oil, yes.

The VICE CHAIRMAN. Do you think that probably if the field had been no larger than the privately owned field, there would still be left under the ground 60 percent of their recoverable oil?

Mr. STABLER. No, sir; 60 was the recovery that I am speaking of. The percentage of recoverable oil under normal methods of operation I would say would be quite small now.

The VICE CHAIRMAN. I am trying to get at oil that can be brought to the surface and not oil that stays down there forever.

I am going to ask you a question you may not be prepared to answer, it is probably out of your field, but has the Government ever sought to enjoin in a situation similar to this the removal of oil from its own property by private operators?

Mr. STABLER. By drainage?

The VICE CHAIRMAN. Yes.

Mr. STABLER. Not to my knowledge.

The CHAIRMAN. Has the Government ever undertaken in this particular field to require the drilling of offset wells?

Mr. STABLER. It has.

The CHAIRMAN. Do we have offset wells operating?

Mr. STABLER. We do.

The CHAIRMAN. How much is the Navy withdrawing through the offset wells?

Mr. STABLER. I can't give you the figure, Senator.¹

The CHAIRMAN. Do you know—have you an impression—as to whether or not the rights of the Government, the rights of the Navy, are sufficiently protected by these offset wells?

Mr. STABLER. I think as fully as is possible by offsetting.

The CHAIRMAN. So that even though the Standard Oil of California is operating the privately owed lands which drain the reserve,

¹ Mr. Stabler subsequently supplied the figure: 5,500 barrels a day.

the offset wells which have been drilled upon the Government lands tend to save for the Government its proper portion?

Mr. STABLER. That is correct, though, of course, they also drain the reserve.

The CHAIRMAN. Naturally. Do you know who operates the naval wells?

Mr. STABLER. The offset wells that you speak of?

The CHAIRMAN. Yes.

Mr. STABLER. The Belridge Oil Co. and the Richfield Oil Co. at present.

The CHAIRMAN. Do you know whether the Navy takes the oil and stores the oil, or whether the oil is sold and the Navy takes a royalty?

Mr. STABLER. It is sold and the Navy takes a royalty.

The CHAIRMAN. So that actually the field, which is denominated a naval reserve, is not being maintained as a reserve at all, but as an operating field for the daily production and sale of crude oil.

Mr. STABLER. Probably 90 percent of its area is being maintained as fully as practicable under the circumstances as a reserve. The other 10 percent is being operated as a going field.

The CHAIRMAN. Of course, when you use the phrase "as fully as practicable" you are using a qualifying phrase which indicates that it is not being held as a reserve.

Mr. STABLER. I intended to use a qualifying phrase.

Representative WILLIAMS. What part of that area is privately owned?

Mr. STABLER. That is too technical a question for me to answer. There are certain legal disputes as to ownership there, and I am not prepared to answer. It is a small part, however.

Representative WILLIAMS. I meant as distinguished from the Government ownership. There may be disputes about who owns the balance, but there ought to be no dispute about which part the Government owns, is there?

Mr. STABLER. The Government owns a very large percentage, and in addition there are two so-called State sections that have been in controversy, and still are I believe, as to ownership, whether the Government owns them or someone else.

The VICE CHAIRMAN. How long are we going to keep any oil there, if you have any information, with private persons operating on their own hook and responsibility and the Government leasing to somebody who will pump it out and then take it out to the general market? What do you mean by reserves? Is there any way of keeping things in reserve?

Mr. STABLER. Not without 100-percent ownership.

The VICE CHAIRMAN. I guess we have gone pretty far afield on that, but it is a pretty important development.

Mr. WATKINS. I think it is important to emphasize that that withdrawal makes a diminishing reserve and not a fixed reserve, as naval policy requires.

The CHAIRMAN. The only way it could be made a reserve would be for Congress to authorize the Navy Department or some other agency to acquire all of the privately owned lands and to cease development.

Mr. STABLER. Did you wish me to pursue, Senator, the fate of the other two reserves?

The CHAIRMAN. If you please.

Mr. STABLER. Naval reserve No. 2, at Buena Vista Hills, Calif., is really not a reserve in any sense of the word. Approximately half the land is privately owned and developed, and instead of having the reserve perfected by acquiring that land, no action has been taken along that line through a long period of years, and so the reserve lands are being operated substantially as though they were in private ownership, though for the benefit of the Government.

Naval reserve No. 3—

The CHAIRMAN (interposing). Who operates naval reserve No. 2?

Mr. STABLER. It is in a number of leases; the Honolulu Consolidated Oil Corporation—that, I believe, is the principal operator there.

The CHAIRMAN. Do you know what its connections are with other oil companies?

Mr. STABLER. Well, it is a subsidiary or affiliate of the Matson Steamship Line, a Pacific Ocean line, I believe. It, so far as I know, is not directly connected with any other oil company there. It has rather close operating affiliations with the Standard Oil Co. of California in the Buena Vista Hills and elsewhere in California.

The Standard Oil Co. of California is the principal owner of the nongovernment lands within the limits of this reserve.

The CHAIRMAN. So that the operations of this reserve are carried on by the Honolulu in conjunction with the Standard of California.

Mr. STABLER. And certain other companies. Incidentally, recently all those companies in the reserve united in a cooperative plan of development, so that they are dealing fairly with each other, with not undue competition between tracts, and the field is being very well developed under that plan.

The CHAIRMAN. You say "Not undue competition between tracts"?

Mr. STABLER. Yes.

The CHAIRMAN. So that this arrangement is an arrangement to control competition of a certain kind. I ask the question without implying any criticism, because obviously any unit plan or proration plan is a plan to control competition.

Mr. STABLER. Well, I think this plan has in common with all unit plans the idea of eliminating competition as between tracts, within the particular field.

The CHAIRMAN. Well, of course, the competition isn't actually between tracts, it is between the owners of separate tracts. There might be two or three tracts under the same ownership and those tracts, of course, would be operated as a unit. Such combination does not eliminate competition.

Mr. STABLER. Substantially so.

Naval Reserve No. 3 is located in Wyoming.

The CHAIRMAN. Give it its name.

Mr. STABLER. The well-known Teapot Dome. That is now a complete reserve of what oil and gas is there in place.

The CHAIRMAN. There again there is a qualification of what oil and gas may be left in place.

Mr. STABLER. That was a very disappointing field. It was found to contain much gas and little oil, so that its value as a reserve for the Navy has never been great. It is completely shut in now. We take

gas pressures from time to time and find that they hold on a level, so that there can be no leakage from that reserve while that condition obtains.

The CHAIRMAN. The sum and substance of it is that the only naval reserve which is completely shut in which is being managed as a reserve is a reserve which scientific opinion now believes contains very little oil. The naval reserves which contain a lot of oil are being operated as commercial fields and not as reserves. That is the sum and substance of it, is it not?

Mr. STABLER. I think that is too strong a statement.

The CHAIRMAN. Well, the modification would be with respect to Naval Reserve No. 1, where the only drilling is on private lands with the offset wells for the Government.

Mr. STABLER. That is right.

The CHAIRMAN. But the private lands are withdrawing 10,000 barrels a day.

Mr. STABLER. But the great majority, as I tried to state quite specifically, of the land in that reserve has been untouched, and we believe to be totally undrained with original pressures intact.

The CHAIRMAN. That was the impression also with respect to the Teapot Dome until the Teapot Dome was leased, and then it was found that somehow or another the oil had vanished.

Mr. STABLER. It never had been there. The pressure was there, the gas was there, but there was no oil, no great amount of oil.

The VICE CHAIRMAN. Is there a considerable part of that field you are speaking of, reserve No. 1, I believe, where the oil would not drain for a period of time, any time, ever?

Mr. STABLER. It is possible that through geologic time it could be all drained out at this end, but very little, if any, drainage from most of the area could possibly have occurred up to this time.

The VICE CHAIRMAN. Could it be occurring? Would it begin to occur when you take pressure out of the area now being drained?

Mr. STABLER. Yes.

The VICE CHAIRMAN. It would begin to seep through?

Mr. STABLER. It would be reflected in decreasing gas pressures throughout the area, which would probably be greatest near where the drainage occurs and gradually less as one went westward.

The VICE CHAIRMAN. Have you determined with any accuracy in the judgment of engineers how far in different types of sand it would be possible practically or otherwise to drain territory? We have had some testimony that the difference in the porosity of the sand is great; therefore I assume the ease with which the oil can be removed is different.

Mr. STABLER. That is very true; and on certain assumptions as to porosity and permeability I think the distance of drainage, the effect of drainage at any distance, could be computed; necessarily some assumptions would have to be made.

The policy of withdrawal that was initiated there in 1909 was affirmed by Congress in the following year by the passage of the act authorizing the withdrawal of lands for classification and for a number of other stated public purposes.

From that time until 1920 there was practically no development of public oil and gas lands except those on which filings had been located under the old mining laws.

PASSING OF GENERAL LEASING LAW

Mr. STABLER. There was, however, a continuous agitation for a leasing law. In 1916 we had passed the forerunner of the present leasing law, an act applicable to lands in the former Wind River Reservation in Wyoming. That act, while it applied only to a small area of land, had in it many of the same provisions that we now find in the current leasing law.

The CHAIRMAN. When you speak of the Wind River Reservation you are speaking of an Indian reservation?

Mr. STABLER. That is right. Rather of certain lands that had been in this reservation and had been ceded to the United States, so that they were lands of the United States, though impressed with a certain trust on behalf of the Indians; they were to receive, among other things, all the receipts from minerals developed, so that they had an interest still in the oil there.

In 1920 there was passed the general leasing law that included provisions covering oil and gas land. There are certain provisions there that I would like to call particular attention to—provisions in the interests of conservation.

For example, in section 16 we have this language:

That the permittee or lessee will, in conducting his explorations and mining operations, use all reasonable precaution to prevent waste of oil or gas developed in the land, or the entrance of water through wells drilled by him to the oil sands or oil-bearing strata, to the destruction or injury of the oil deposits.

That is followed by a sentence that makes violation of the provisions of that section grounds for forfeiture of the lease.

Then in section 30 we have this language:

Each lease shall contain provisions for the purpose of assuring the exercise of reasonable diligence, skill, and care, in the operation of said property.

Further down it provides that such other provisions shall be incorporated as the Secretary of the Interior—

May deem necessary to insure the sale of the production of such leased lands to the United States and to the public at reasonable prices; for the protection of the interests of the United States, for the prevention of monopoly, and for the safeguarding of the public welfare.

Those provisions are implemented by section 32, which provides:

That the Secretary of the Interior is authorized to prescribe necessary and proper rules and regulations and to do any and all things necessary to carry out and accomplish the purposes of this act.

one of which of course was conservation.

There is another provision that I think I should call attention to in section 27, an antimonopoly provision, because it has a bearing on unit operation. The last proviso of section 27 states:

That if any of the lands or deposits leased under the provisions of this act shall be subleased, trustee, possessed, or controlled by any device permanently, temporarily, directly, indirectly, tacitly, or in any manner whatsoever, so that they form part of, or are in anywise controlled by any combination in the form of an unlawful trust, with consent of the lessee, or form the subject of any contract or conspiracy in restraint of trade in the mining or selling of coal, phosphate, oil, oil shale, gas, or sodium, entered into by the lessee, or any agreement or understanding, written, verbal, or otherwise to which such lessee shall be a party, of which his or its output is to be or

become the subject, to control the prices thereof or of any holding of such lands by any individual, partnership, association, corporation, or control, in excess of the amounts of lands provided in this act, the lease thereof shall be forfeited by appropriate court proceedings.

Representative WILLIAMS. Under that law how is the royalty determined?

Mr. STABLER. It is provided that the royalty shall be in the amount of or value of production and shall be certain specified percentages, or not less than certain special percentages, written into the law. The Secretary of the Interior is authorized to fix the royalty.

Representative WILLIAMS. As a minimum. Is a maximum set?

Mr. STABLER. No maximum.

Representative WILLIAMS. What has been the practice, do you know, what is the royalty?

Mr. STABLER. That has varied. Under the present law and leases the royalty is set at a minimum $12\frac{1}{2}$ cents with a step scale increasing as the production in barrels per well per day increases to a maximum of 32 percent.

Representative WILLIAMS. The royalty is not the same in all places.

Mr. STABLER. That is true.

Representative WILLIAMS. It is not?

Mr. STABLER. It is not. I may add that the average royalty received under the Leasing Act since its beginning is about 12 percent.

Prior to the passage of this Leasing Act the Bureau of Mines in its duty of developing better processes of production had been cooperating in the Rocky Mountain region, particularly, with operators, in attempting to secure the use of better methods of operation, so that when the act was passed the Secretary of the Interior delegated to the Bureau of Mines the duty of supervising operations under the act, a duty which it performed until 1925 when it was transferred to the Department of Commerce. That duty was then referred to the Geological Survey, where it has remained since under the auspices of the Conservation Branch.

Representative WILLIAMS. Does that law require unit operation?

Mr. STABLER. No, sir.

Representative WILLIAMS. Does the law now require it?

Mr. STABLER. There is a provision in the present law that authorizes the Secretary of the Interior to include in any lease in his discretion a provision that the lessee shall abide by and conform to such unit operation requirements as the Secretary may make; that is, the lessee is bound to unit operation in the discretion of the Secretary.

Representative WILLIAMS. What has been the practice about that? Has unit operation been required?

Mr. STABLER. I think it may fairly be said that up to date it has been voluntary.

Representative WILLIAMS. In other words, it has not been written in the lease requiring unit operation.

Mr. STABLER. Each lease issued in recent years has simply included this provision that the Secretary may require it in his discretion, but it isn't required in any lease that has been issued.

Representative WILLIAMS. And the Secretary has not, as I understand you, required—made it mandatory—that they operate under a unit system.

Mr. STABLER. That provision of law is quite a recent one, and, to the best of my knowledge, the Secretary has not required unit operation under that provision to date. In a few cases leases have been issued subject to a unit plan already in existence.

The CHAIRMAN. Aren't you requiring all permittees and lessees to agree to conform to a unit plan?

Mr. STABLER. That is the equivalent of this provision of law; that is, they consent to enter into a plan if and when required.

The CHAIRMAN. Has not the Department before it scores, if not hundreds, of unit plans?

Mr. STABLER. We have had before us something over 1,600 unit plans submitted by proponents, among them lessees and operators of public lands.

The CHAIRMAN. How many have been approved?

Mr. STABLER. 112. I am getting a little ahead of myself, though, Senator, if you would like to develop this—

The CHAIRMAN. I thought, in view of the questions asked by Congressman Williams, that it might be appropriate to develop that here, but it is immaterial. I thought perhaps the Congressman might be getting an incorrect impression of what the fact is from the questions and answers, though the answers were perfectly correct.

Mr. STABLER. If you prefer, I can go right into that.

The CHAIRMAN. Develop it in your own way.

OPERATING REGULATIONS UNDER THE GENERAL LEASING LAW

Mr. STABLER. I was about to start on development of the other phase of conservation activity; that is, that performed under what we call the operating regulations. In 1921, in order to secure in practice the conservation provisions of the act, certain operating provisions were adopted, first as a plan for conducting work with supplementary operating regulations. As the science or art of production developed, those operating regulations have been changed, and a new edition, somewhat revised, was put out in 1923, another in 1926, and we are now operating under regulations effective in 1936.

Those regulations cover quite a little book. I won't attempt to go into detail but their purpose is to make certain that drilling of wells, plugging of wells, and the producing of wells on the public and Indian lands shall be so conducted as to avoid waste, and that is one of the principal means of accomplishing conservation of oil and gas on the public lands at this time.

The other is this matter of unit operation, which we regard as a highly beneficial and desirable conservation measure. The Federal legislation with reference to unit operation I have extracted here on three pages, and if you are willing I will submit this for the record without reading, unless you desire to hear these provisions.

The CHAIRMAN. It may be received.

(The abstract referred to was marked "Exhibit No. 1311" and is included in the appendix on p. 9861.)

Mr. STABLER. That starts out with a temporary act in 1930, a permanent act in 1931, and a supplementary act in 1935 as the chief items of legislation.

Now, under those acts I think we have received more unit plans for consideration, have considered more unit plans of various varieties,

than perhaps any other agency in the world. As I stated a moment ago, more than 1,600 of those plans were submitted to us for consideration, many of them obviously for the principal purpose of securing extension of permits, but nevertheless a great many were bona fide plans, and of those we have found up to date 112 that we considered worthy of approval, so that as of the present time we have 112 unit plans embracing an area of 1,639,593 acres.

Here is the frailty of the system: Under those plans, 81 percent of the land presumed to be productive and included in the unit area is committed to the plan. In nearly every plan there is some hold-out area that impairs its value.

The CHAIRMAN. In other words, the law is not strong enough to compel the inclusion of all tracts, and as the law has been operated, the Department of the Interior has permitted various lessees to formulate their own unit plans and has not attempted to impose upon them a rigid rule as to what the plan should be.

Mr. STABLER. That is true. We have offered certain suggestions. We received so many requests for a form of plan that would be acceptable that we have gotten out one or two circulars indicating things that we thought should be included in the unit plan. But we receive and consider on its merits any form of plan that is submitted, and if it will accomplish the desirable purposes, approve it.

The CHAIRMAN. So there is no attempt to impose a particular formula upon those who are operating, but there is an attempt to permit the idea to grow and formulate itself, as it were.

Mr. STABLER. That is very largely true. There are one or two things that we necessarily require. For instance, the act authorizing the unitization of public lands requires that each such plan shall have in it a provision authorizing the Secretary of the Interior to modify or alter the rate of prospecting and development, and the rate of production, in his discretion, except as that discretion is limited in the plan itself. Now, under that provision in general we have in the unit plan recognition of that authority in the Secretary limited to the condition that he may change those rates in the public interest on order specifying the particular public interest served.

Senator KING. I assume there are no privately owned lands embraced in that million acres plus?

Mr. STABLER. Yes; quite a considerable area.

Senator KING. Privately owned?

Mr. STABLER. Yes, sir.

Senator KING. Do you attempt, then, to yoke the ox and the ass together, the publicly owned and the privately owned?

Mr. STABLER. That is done quite successfully. Our principal trouble is that some of the privately owned will not be yoked and remains outside. Some of it comes in.

Senator KING. There are no coercive measures employed to yoke?

Mr. STABLER. None that could be, so far as I know.

Representative WILLIAMS. Well, from your study have you arrived at any, well I will say, irreducible minimum of standards that should be required?

Mr. STABLER. In general, in these unit plans we—pardon me, do you mean standards of operation or standard form of plan?

Representative WILLIAMS. Well, I have in mind operations, the manner in which the industry should be operated so as to conserve the oil.

Mr. STABLER. Well, one of the provisions that we regularly insist on being incorporated in the plans is that all operations under the plan shall be conducted under these oil- and gas-operating regulations, which themselves set up standards, and under the supervision of our engineers in the field.

The thing must be rather flexible, because conditions vary so that in general those requirements are in flexible form, to be made more specific in the judgment of the supervising engineers.

Representative WILLIAMS. Well, then, in other words, as I understand you, there is no effort made to have a real, compulsory unification in the operation of it.

Mr. STABLER. That is true, but I should probably qualify that statement by going back into history a little bit. There was a suggestion made here yesterday that it might be a good thing to have all the public lands held out of operation, since we have a surplus of oil. That was attempted back in 1929. The President then declared that there should be complete conservation of oil in his administration and that no further permits should be issued and no leases should be issued except those mandatory under the law. Under this rule a lease would be issued only where a discovery of oil or gas under an outstanding permit was made.

That policy was maintained until 1932. The idea, of course, seems to have great merit from a national viewpoint; from the point of view of States with large production and no public lands it would seem to be ideal. But, from the point of view of the five public-land States who have production of oil, it was considered to be a device of the devil. In other words, they depended largely on development on public land for their prosperity, for their revenues. They depended to a considerable extent on oil and gas produced on the public lands. So that that was very objectionable.

The pressure got so heavy that in about 3 years the ban was removed and in April 1932 the lands were again opened to permit entry.

Representative WILLIAMS. That, I take it, applied only to public lands.

Mr. STABLER. That is true.

Representative WILLIAMS. That still would not give you 100 per cent preservation by reason of the operation of the privately owned lands.

Mr. STABLER. That is correct.

Representative WILLIAMS. What I had in mind was whether or not there is any effort made, whether it is advisable to make an effort or whether it could be done, to apply a compulsory system not only to the public lands but to the privately owned lands within that area also.

Senator KING. Are you asking him as a geologist, or as a lawyer interpreting the Constitution and the rights of individuals?

Representative WILLIAMS. I am asking whether it would be advisable to do that or whether it could be done.

Mr. STABLER. I think it would be a fine conservation measure if that could be done.

Representative WILLIAMS. There has been some talk here about the States doing that. There seems to be no question but what the States can do that. There may be some question about it, especially by Senator King here, but some of the others seem to think that that can be done. In fact it is being done.

Senator KING. Don't put me in any category. I am a free thinker.

Mr. STABLER. I was about to state that in 1932, when the granting of permits was resumed, it was with the condition that the permittee would, or the applicant for permit would, consent to having his land placed under a unit plan. That might be regarded as a persuasive measure, at least, though not exactly compulsory.

I wanted to make it clear when I said that there was no compulsion that there was, nevertheless, a certain amount of persuasion to get public lands committed to unit plans.

Senator KING. Have you attempted to get privately owned lands where there were no public lands contiguous to submit to the unit plan and to submit to your jurisdiction, and to submit to such jurisdiction as may be set up?

Mr. STABLER. Where there are no public lands contiguous?

Senator KING. Yes.

Mr. STABLER. No, sir.

Senator KING. Solely to those where there were public lands contiguous?

Mr. STABLER. Or Indian lands.

Representative WILLIAMS. Are you familiar with the bill which is now pending in the House on that very question, to create a Federal Conservation Commission and give them the authority to inspect the operations of the various wells throughout the country and determine whether it is in accordance with conservation principles set up under that law?

Mr. STABLER. Frankly, sir, I have not read that bill. I have glanced at it, and don't have sufficient familiarity with it to discuss it.

The CHAIRMAN. The bill was not inspired by the Interior Department, was it?

Mr. STABLER. I am sure I don't know where it was inspired.

The CHAIRMAN. It didn't come out of the Geological Survey?

Mr. STABLER. Not out of the Conservation Branch. I can speak for that part of the Survey very definitely.

The CHAIRMAN. Do you know whether or not that proposal has been under consideration in any bureau of the Interior Department?

Mr. STABLER. I have no knowledge of it, Senator. I think something like it was at one time referred to the Geological Survey for comment, but whether that is the present form of the bill or not I don't know.

Senator KING. A bill of that character may be anticipated, may it not, in view of this tremendous drive to centralize authority in the Federal Government?

The CHAIRMAN. It is here. The bill is with us. We don't need to anticipate it.

Senator KING. Now you may place me in a category if you want to.

Mr. SHAUGHNESSY. Can you tell me whether the existence of hold-out acreage has seriously handicapped any of the Government's plans for unit development of the public land?

Mr. STABLER. It necessarily has.

Mr. SHAUGHNESSY. Are there any serious cases in which it has really caused the unit plan to fail?

Mr. STABLER. I wouldn't say to fail—to be not completely successful. For example, the first large one that we had, the north dome of Kettleman Hills, there was a certain amount of hold-out acreage there. In fact, the actual acreage committed to the unit plan was less than half of the area, but about an equal amount of land owned by the Standard Oil Co. of California has been operated more or less in harmony with the plan; but certain acreage in the north end, certain acreage on the east edge, was operated pretty much on the old competitive system and forced the lands in the unit and that owned by the Standard to be operated in much the same manner for some distance back from these tracts.

Senator KING. I suppose it may be assumed, Mr. Stabler, may it not, with more or less of certainty that the unit plan does have advantages in economy and in conservation over the purely individualistic plan of operating the oil fields? Is that accepted as a thesis which may not be successfully combatted?

Mr. STABLER. The unit plan itself gives the opportunity. The administration of the plan and operation under it will give the answer to your question or your observation. The plan is no better than its administration, and it is conceivable that a plan might be developed that would have no conservational effect. By and large, I think it may be safely said that lands operated under a unit plan will produce considerably more oil—perhaps, on the average, 25 or 30 percent more oil under present methods of operation—than if they were not under that plan. Now that is a very hard statement to prove. It is an opinion based on such experience as we have.

Senator KING. We are in the realm more or less of speculation. Assume two fields of comparative merit, one operated by the individual owners, but they operate in a scientific way and with a desire for conservation and efficiency and economy; and the other field, operated by the unit plan, under proper management—would you say there was any advantage in the latter over the former, assuming both fields were wisely and properly and scientifically and economically administered?

Mr. STABLER. I don't know of any advantage that the unit plan would have. For example, the best-operated field in this country of which I know is not under a unit plan. That, however, is under a single ownership, under a single Indian lease, and it is just about as near perfect as any operation could be under conditions that are rather difficult.

Senator KING. Then if a State set up such machinery as would require, through supervision or otherwise scientific (I am using that in a broad sense) administration of the unit field and scientific operation of the individual field, there wouldn't be any particular difference in the results?

Mr. STABLER. I wouldn't think so. The unit plan is simply a tool to accomplish the results, to make it easier.

Mr. WATKINS. Senator King, may I make a point in that respect? It seems to me that you have stated a highly unrealistic comparison.

You have assumed scientific operation of a pool which is being operated on an individualistic basis by various owners and various operators.

Senator KING. I said under proper supervision, so you would have just as good mechanics as you would have in the unit plan of operation.

Mr. WATKINS. But it is impossible to secure that proper supervision unless you have some authority somewhere which sets specific engineering standards, minimum standards, so you don't have in your hypothetical case a comparison between individualistic operation on the one hand and scientific operation on the other.

Senator KING. There can be individualistic operation and yet that can be sufficiently supervised in a proper way, and within legal limits, and operated just as efficiently as the unit rule, because Mr. Stabler has indicated just now that one of the most efficient fields is one which is operated individually rather than under the unit rule.

Mr. McCONNELL. That is the unit rule. It is operated individually by one company. It is a unit rule because it is operated only by one owner.

Senator KING. I am not sure that he had that in mind in the answer which he gave to me.

Mr. SOYSTER. I think, Senator King, that there is one point that ought to be brought out, and that is where you have a structure operated by a number of individuals, you do not have the same flexibility of application of engineering principles to the production of oil because of the individual-ownership interests which would mean, of course, each one is going to endeavor to get his proper share if they are willing to go that far, but the fact remains on the apex of the structure you may have a gas cap and there are certain wells that cannot be produced in that area without dissipating the energy of that structure, which would be to the detriment of other properties on that structure. Yet if the individual who held that particular tract of land is unable to obtain any oil from that tract, I don't know that he would be willing to just sit by and have his property drained and get no revenue from his expenditure or capital investment.

Senator KING. Generally speaking, then, if I understand the conclusions reached by you scientific men, it is that the unit system is preferable to the individualistic operation.

Mr. SOYSTER. That is right, because you have then the development of a structure as a unit, as a single structure, and you can apply your engineering principles to the whole rather than to each individual tract.

Senator KING. It seems to me if there are some obstacles to be encountered, that generally speaking if that could be effected, it would be wise.

Mr. SOYSTER. That is true.

Mr. AVILDSSEN. Mr. Stabler, would you tell us a little bit about this field which you speak of which is the most efficiently operated field, which is not under unit operation? I don't think that is entirely clear.

Mr. STABLER. The field to which I had reference was the little Hogback field in New Mexico. It comprises about 160 acres of Indian land, productive Indian land, under a single lease. It is operated by either the Standard Oil Co. of Indiana or a subsidiary of that company. There the oil and water are together in the sand

over the whole field. The closure is small, so that it is a very delicate operation to skim the oil off the top of the water and get clean oil.

There is a wonderful water drive there—natural. It resolves itself into a question of having wells dispersed at suitable intervals over the field and holding down the production so that they can get clean oil. As a matter of fact, they open up the spigots, you might say, just like you would open up the tap in a house faucet, and oil will come out, but if you open up wide, water will come with the oil. By holding down the production to that which will give clean oil, they have already produced about 60 percent of the oil that was computed as being in the sand originally, and they are still going pretty strong. They will have a wonderful recovery there, whereas if they had been in a competitive status and wells had been opened up full tilt as they are always in competitive status, the field would have gone to water and most of that oil would have been lost.

Mr. AVILDSSEN. Isn't that unit operation, what you have just described?

Mr. STABLER. In principle; yes. It is unit ownership, the most perfect unit operation you can get, of course.

Mr. AVILDSSEN. Then I think your previous statement that the most efficient field in the United States is not under unit operation is not correct. Didn't I understand that was your statement before?

Mr. STABLER. I may have said that. What I had in mind was that it was not under one of these unit plans of development submitted for approval under the act authorizing it. In principle it is unit operation, no question about it.

Mr. WATKINS. Perfect unit operation of a geological structure.

Mr. McCONNELL. You just said, Mr. Stabler, that they would have gotten less than half of that oil if it had not been operated as a unit field.

Mr. STABLER. I don't think I said that, sir. I said if it was operated in a competitive way, a great deal of the oil that has been recovered would be lost. I wouldn't pretend to say whether it was half.

Mr. McCONNELL. It would be a very large percentage, would it not?

Mr. STABLER. It would depend wholly on how wide open the wells were operated, how much water was drawn in, how much of the oil was dissipated in the tract. It is a question of speed of production in the particular field more than anything else.

Mr. McCONNELL. Even though that private ownership were under proration you would still not recover the amount of oil you would expect to recover under a unitized field?

Mr. STABLER. That again I think would depend on the extent of proration. If the proration rule had been such as to give the same results as the operation that actually occurred, it would have had just as beneficial effect, but it is pretty hard to conceive that that would have been true.

Representative WILLIAMS. Well, if proration were scientifically applied, as it is in unit operation, you would have reached the same result, wouldn't you? That is, if you limited to each well its part, wouldn't you get the same result, or would you, as you would under a unit operation?

Mr. STABLER. Normally I don't believe that you would, as a matter of practical application. Proration as it is applied is generally an over-all rule. In the instances I know of down in New Mexico they have a limit of production of each and every well. That limit may be all right for some wells, it may be all wrong for others. They can't single out the individual well for scientific operations, and that is what should be done, and normally would be done under unit operation.

The CHAIRMAN. The Interior Department has not as yet in any instance invoked the discretion of the Secretary as authorized in the law under the unit plans to govern the rate of production, has it, from any particular fields under a unit plan?

Mr. STABLER. The Secretary, I believe, has never issued such an order as is contemplated in one of those unit plans. We have by voluntary action of the operators, under persuasion, exercised the equivalent of that, but not by order.

The CHAIRMAN. Then by moral suasion or suggestion to the operators, you have actually restrained the amount and rate of production in certain fields.

Mr. STABLER. That is true. We do that, I might say, almost regularly as a matter of conservation—certain fields, certain wells.

The CHAIRMAN. What criteria govern your suggestions to operators?

Mr. STABLER. First of all, we want every well operated at its best gas-oil ratio in order to conserve the energy of the pool. That is the most important consideration in our operation. I have in mind one case in which production from a well under unit operation has been limited partly to get the best gas-oil ratio, but partly in order that justice may be done to the various parties committed to the unit plan, that further exploration may be done so that the benefits may be properly proportioned before there is much production from the field.

The CHAIRMAN. Have these suggestions originated with the Department or have they originated with the operators and crystallized into agreements without an order from the Secretary governing the rate of production?

Mr. STABLER. A great deal is done voluntarily by the operators in the direction indicated. It is only——

The CHAIRMAN (interposing). When you say "voluntary" are we to infer from your statement that operators have come to the Department and have suggested that the rate of production should be held down, and you have given your approval of that?

Mr. STABLER. I don't think it has come up in that way at any time, Senator.

The CHAIRMAN. When you said that it was done voluntarily, I was trying to develop whether or not the impetus came from the Department or from the operators.

Mr. STABLER. Normally our engineers are through the field at fairly frequent intervals, and they discuss the problems with the engineer in charge on behalf of the operator, and whenever possible there is a meeting of the minds there. Whether the suggestion comes from one side or the other, I couldn't say.

The CHAIRMAN. Do you take into consideration any other factor than that of scientific conservation?

Mr. STABLER. I think I may say this, that for a good many years whenever any lessee of public lands has requested what we call produc-

ing relief—in other words it is desired to shut in his wells—that has been granted freely by the Department when it wouldn't be against the interests of conservation. In other words, the Department has been favorable in a time of surplus and overproduction to lessees shutting down until conditions are better.

The CHAIRMAN. What weight, if any, does the Department give or the Bureau give, to the royalty interest of the Government, the Reclamation Service and the State within which the deposit lies?

Mr. STABLER. In this matter of shutting down?

The CHAIRMAN. Yes; in this matter of restraining the rate of production, the rate and amount of production.

Mr. STABLER. Fundamentally, that can't be separated from the problem. We believe that if the oil is shut in until conditions are more favorable for production, the revenue of the United States, the States, the reclamation fund, will be greater.

The CHAIRMAN. In other words, the receipt might be postponed.

Mr. STABLER. Yes.

The CHAIRMAN. Now, that is a general theory. Do you consult the Reclamation Bureau, for example, in any manner whatsoever with respect to the rate and amount of production?

Mr. STABLER. No, sir.

The CHAIRMAN. Do you consult any other agency of Government, Federal or State, with respect to the amount to be received?

Mr. STABLER. Of course, the authority to shut in must be O. K.'d by the Secretary of the Interior, so that there is consultation between the members of the Geological Survey and of the Secretary's closer staff and perhaps of the Solicitor, but beyond that there is no consultation, ordinarily.

Mr. SOYSTER. Except in the case of Indian land, Mr. Stabler, when we do discuss with the Indian Office because of the fact that the lands in many cases are allotted lands belonging to individual Indian allottees.

Mr. STABLER. That is true. I was speaking of the public lands.

The CHAIRMAN. With respect to Indian lands, there is a definite criterion based upon the interest of the Indian allottees in their income.

Mr. SOYSTER. That is correct.

Mr. STABLER. And possibly of the immediate situation of the Indian. He may very greatly need the little royalty revenue that comes in.

The CHAIRMAN. What are the factors that enter into your determination as to whether or not there is a surplus of oil which would justify a shut in?

Mr. STABLER. Well, I suppose possibly you are leading up to prices. The most definite indication of surplus is a falling price, of course.

I had just a word more to say indicating the extent to which unit operation of the public lands has gone. Incidentally there are two of these unit plans in operation on Indian lands, as well as 110 on public. The reserves of oil in the fields operated under those plans represent 5.6 percent of the total reserves in the United States, not a very large percentage but still quite an appreciable factor, those reserves being in the neighborhood of 1,000,000,000 barrels of oil. With the approval recently of a plan for the Salt Creek field, now

approximately half of the production, 51.5 percent of the month of May last, was produced from public lands within unitized areas.

I think that is all I have to say unless there are some questions.

Senator KING. Just one question: Would you differ from this statement which I find in Mr. Kemnitzer's book,¹ reading from page 85:

At present the reserves are generally considered at about fifteen billion barrels, or roughly, fifteen years' supply. However, these reserves are computed from developed fields occupying less than 2 percent of the 1,043,247 square miles, already 35 percent of the total area of the United States, wherein oil fields might be found. All of this enormous area will not be oil bearing but much of it will.

Would you consider that a fair statement?

Mr. STABLER. I would disagree in part with that. I wouldn't say that oil will be found in much of that area. I think it will be found only in a small percentage of that area.

Senator KING. We have found it only in less than 2 percent of the billion acres of the country.

Mr. STABLER. Of the total area of the United States, that is probably true. I think all the producing oil fields occupy only about 5,000,000 acres of land.

The VICE CHAIRMAN. They found gold in a much smaller percentage of the total area, didn't they?

Mr. STABLER. Yes.

Mr. WATKINS. I think Mr. Soyster might add something to that question.

The VICE CHAIRMAN. It doesn't seem to me it matters how much we have; we shouldn't waste what we have.

Mr. STABLER. I agree.

The VICE CHAIRMAN. That all we have a right to use is what we can use without waste.

Senator KING. Would you differ from this statement made by Mr. Byles, president of the A. P. I.?

More than a billion acres of geological formation which may contain oil remain to be explored. The Nation's deposits of bituminous oil and coal shales are capable of yielding supplies of fuel adequate for centuries.

Mr. STABLER. I think probably that is correct.

Mr. WATKINS. Four or five times the cost of producing oil from the natural reservoir.

Representative WILLIAMS. What part of the crude production comes from public lands? What percentage?

Mr. STABLER. A little less than 5 percent and about an equal amount from Indian lands. The total is somewhat less than 10 percent of the production in this country.

The CHAIRMAN. I wonder if by any chance you examined the testimony of Mr. La Fleiche before this committee a few days ago.² He discussed bonds on leases on the public domain.

Mr. STABLER. I haven't seen his testimony and haven't seen him.

The CHAIRMAN. The statement was made that he thought it would be beneficial to the small operator if in the first place the Department of the Interior did not require a rental bond, and, secondly, that with

¹ "Rebirth of Monopoly," by William J. Kemnitzer, Harper & Bros.

² P. 9406, et seq., supra.

respect to drilling bonds they should be made commensurate with the risk involved in the drilling of a well. As I understood him, he pointed out that a \$5,000 drilling bond was required regardless of whether the well may be only 500 feet deep or 5,000 feet deep, and his suggestion was that it would be of great benefit to the small operator to have the bonds so regulated because he says that the small and independent operator may and will develop lands which the large operator wouldn't bother with because of the small amount of production. Have you any opinion with respect to that?

Mr. STABLER. I agree with him in principle that the bond should be made somewhat commensurate with the risks involved. However, I would be inclined to place \$5,000 as a minimum and suggest that we might require a greater bond where necessary.

The CHAIRMAN. Of course, that wouldn't be of any relief to the small fellow who finds it difficult to put up a \$5,000 bond. The difficulty arises from the fact, as you know, that with respect to a drilling bond, the bonding companies ordinarily require such indemnity from the operator that the small operator is unable to furnish that indemnity; usually cash or United States Government bonds are required, and the small operator just doesn't have the capital resources to meet the requirement.

Mr. STABLER. Of course, the maximum requirement necessary is to have \$5,000 that he doesn't absolutely need to drill with. He can invest that in Government bonds and deposit them as security with the United States and draw interest on them. If the man hasn't \$5,000 or can't raise \$5,000 for that purpose, I don't believe he has any business operating on Government lands.

The CHAIRMAN. Now, then, do you have any opinion as to the percentage of Government lands operated by the so-called majors and the percentage of Government lands operated by the so-called independents?

Mr. STABLER. I don't have any very definite impression. We have both in large numbers, and I would just guess—it is purely a guess—that half or more are operated by the independents.

The CHAIRMAN. I don't know whether you had ever attempted in the Bureau or in the Department to make a survey of the character of the Government lessees.

That has not been done?

Mr. STABLER. I never have done it and I don't know that anyone else has.

The CHAIRMAN. The Leasing Act undertakes to limit the amount of acreage which can be owned or leased or operated by one lessee, does it not?

Mr. STABLER. Yes.

The CHAIRMAN. So that in principle the purpose of the act was to encourage the small operators.

Mr. STABLER. Yes, I think that is perhaps the striking difference between operations in this country and in foreign lands. Yesterday the question of foreign operations was raised. Undoubtedly the foreign fields have much the same geological conditions as we have here, the same engineering principles are involved in producing oil there, but generally speaking in foreign countries an operation in one field might be conducted as a unit because a lease is given one party for the whole area, whereas in this country the leasing law tends

to split a field up in as many particles as possible and make unit operation as difficult as possible, make conservation very hard to attain.

The CHAIRMAN. Scientifically, conservation can best be administered when you have centralized control of deposits.

Mr. STABLER. Within a particular field.

The CHAIRMAN. Within a particular field; yes.

Mr. STABLER. There should be, for purposes of operation, a perfect monopoly within a field.

The CHAIRMAN. And then the science of conservation tends to support the monopolistic idea within a particular field.

Mr. STABLER. Within the limits of the field, but one field, of course, doesn't control the oil industry.

The CHAIRMAN. Then, on the contrary, the idea which is prevalent in our Western States and which is written into the law that the independents should be encouraged is at least not in harmony with the purely scientific idea of conservation.

Mr. STABLER. I never have found that phrase in the law, Senator, that the independent shall be encouraged.

The CHAIRMAN. No, but the effect was. I didn't find that in the law either, but that was the purpose, was it not, of the limitation?

Mr. STABLER. I think the purpose of the limitation was to prevent any single company in the United States from acquiring all public oil and gas lands rather than to encourage or discourage an independent—

The CHAIRMAN (interposing). Let's see. What is the provision in the law? What is the limitation as to the leases that one operator may hold?

Mr. STABLER. Shall I read from section 27?

The CHAIRMAN. Yes, please.

Mr. STABLER (reading from the Leasing Act of 1920):

That no person, association, or corporation, except as herein provided, shall take or hold more than one coal, phosphate, or sodium lease during the life of such lease in any one State.

I find I am reading from the original law and not the law as it now stands.

The present act provides:¹

That no person, association, or corporation except as herein provided, shall take or hold coal, phosphate, or sodium leases or permits during the life of such leases or permits in any one state exceeding in aggregate acreage 2,560 acres for each of said minerals; no person, association, or corporation shall take or hold at one time oil or gas leases or permits exceeding in the aggregate 7,680 acres granted hereunder in any one state, and not more than 2,560 acres within the geologic structure of the same producing oil or gas field.

The CHAIRMAN. Now, that being the provision of the law, making a restriction to one lease in the same field, how can you draw the conclusion that the purpose was to prevent one company from acquiring all the oil land on the public domain? Since there is a limitation to one lease per owner or operator in a particular field, I take it the inevitable effect would be to encourage diverse ownership, therefore to encourage the independent.

Mr. STABLER. Diverse ownership certainly, but whether it shall be an independent or a major or a little man or big man isn't indicated so far as I can find out.

¹ Reading from the Leasing Act as amended March 1931.

The CHAIRMAN. Oh no, you are quite right about that, but the whole purpose of limiting to one lease in a field to three in a State was to promote as many diverse operators as possible. Would you not say that?

Mr. STABLER. I would like to call attention right in that connection to the act of 1935 which states that lands operated under unit operation shall be free from these acreage limitations.

The CHAIRMAN. Yes; I was going to come to that. In other words, the point is that the unit operation provisions are contrary to the original provisions of limitation and necessarily so because to reach the scientific objective of unit operation you must get away from the principle of diverse operation.

Mr. STABLER. Let us say that they are an improvement on the original form of law.

The CHAIRMAN. Well, we might even accept that. I am not discussing the matter now in the sense of whether it is to be approved or disapproved but merely to bring out the diverse factor. Here is one system of unit operation which tends to single ownership and here is another system of independent operation which tends to diverse ownership. The testimony of the experts, of the engineers, of the scientists, is that you can best conserve the oil with the unit operation but on the other hand it is obvious that that tends toward monopoly, as you said, or to unit development as Senator King said.

Mr. SOYSTER. There is one other possible answer to that. When the 1920 act was passed, the reserves, the known reserves, or estimated reserves of proven fields weren't as great as they are today, and there was a tendency on the part of the Government to encourage development of the public domain, to determine the reserves of petroleum in this country. However, with changing conditions, with an available oversupply—that is, that could be produced at any time by opening the wells—there is no longer that same necessity to determine at least to the same extent that there was originally the reserves of this country, and consequently the act of 1935 was passed, a new theory of development, one of sticking closely to conservation.

The CHAIRMAN. Do you think that we have an excess amount of reserves now?

Mr. SOYSTER. I wouldn't say an excess amount of reserves. I would say that you might never have an excess amount of reserves. Of course, the effect the estimated reserves might have upon the market is something that is difficult to say. No one knows 10 years or 20 years hence what the use will be for petroleum, whether it will be as great or greater.

The CHAIRMAN. Is it your opinion, are you trying to say to the committee that you believe that the development by independent ownership should not be encouraged?

Mr. SOYSTER. I will say this: I think that fields should be developed according to the best engineering practices known to the industry as of a given time.

The CHAIRMAN. Regardless of the effect upon these other factors of independent ownership, of price, and of income to the States—

Mr. SOYSTER (interposing). That is right. That is what I am trying to say.

The CHAIRMAN. That is what I am trying to find out. There are many others who feel that these other factors ought to be given great weight.

Mr. SOYSTER. That doesn't deprive the individual or the independent of an opportunity to have his place in the picture just as he has today. If he comes into such a unit plan and is allocated his proportionate share of the production of that field, he gets what he is entitled to, based upon the best estimates of the productive area.

The CHAIRMAN. But there is no disposition upon the part of the Geological Survey or of the Department of the Interior now to restrict the granting of leases, is there?

Mr. SOYSTER. Not to my knowledge.

The CHAIRMAN. Well, of course, as Mr. Stabler testified in 1929, the policy was definitely adopted of closing in all of the reserves upon the public domain.

Mr. SOYSTER. That is right.

The CHAIRMAN. Thereby penalizing, as it were, the Western States, most of whose reserves are on the public domain.

Mr. SOYSTER. I think the only time there has been any tendency toward not issuing a lease is when someone applies for a lease in a remote area where you know that igneous rocks occur and the chances for production are practically nil, where it appears to be a speculative proposition to take what they can get from the suckers.

The CHAIRMAN. Since the policy of 1929 was abandoned the Department is not restricting the issuance of leases.

Mr. SOYSTER. That is correct.

Mr. STABLER. I would like to make one little correction to that idea, Senator. In proven areas where leases are issued on competitive bidding, lands are not put up for sale unless we regard them as being drained of their reserves. In other words, we don't push the leasing, though when it is pushed by reason of drainage or application outside of proven fields, we issue them as a matter of course.

The CHAIRMAN. Are there any other questions to be addressed to Mr. Stabler?

Mr. BALLINGER. Mr. Stabler, one of your colleagues said that the cost of producing oil from coal would be about four or five times the cost of producing it from oil in the ground. I wanted to read in the record testimony from hearings on House Resolution 441, September 1934, page 752. Mr. Pettengill was making the statement:

Mr. Farish has said we can produce gasoline from soft coal today with the present method of extraction and manufacture at about 12 cents, and if our soft coal reserves are unlimited, as is universally accepted, would that lead one to the conclusion that if we were to forego the taxes on gasoline we could supply unlimited quantities of gasoline from soft coal to the American consumer at a cost of only 2 cents a gallon or more?

Mr. TEAGLE. I should think that was a very fair assumption.

If you take the present cost of gasoline, 16 cents a gallon—

Mr. WATKINS (interposing). That isn't the cost of producing it.

Mr. BALLINGER. He says, "supply the American consumer." That means the distribution cost as well as the cost of manufacture. If you add you get 18, if you add the tax on that you get 24, if the tax was 7 it would be 25, if it was 8 it would be 26, but the ratio between 16 and those figures would be less than two times the cost.

Mr. WATKINS. May I observe that my statement a moment ago referred to a statement on the possibility of producing liquid fuels

from shale and from coal and from vegetable matter, and I said it is probable that the cost would be four or five times. I am not sure just what the cost of producing gasoline is today, but my guess is that it is up in the neighborhood of 4 or 5 cents—I mean to say the cost at the refinery—so that was a general statement applied to these liquid fuels from other substitutes.

Mr. BALLINGER. Mr. Farish says the cost of extraction and manufacture today under present methods from coal would be only about 12 cents, so the ratio would be only two times, not four or five.

Mr. WATKINS. I am not sure just what the cost of producing gasoline is, but I think it is under 6 cents.

Mr. AVILDSSEN. I think it is around 5 or 6 cents at the refinery.

Mr. BERQUIST. Our figures don't mean anything.

Mr. AVILDSSEN. What do they show—about 6 cents?

Mr. BERQUIST. Between 5 and 6.

Mr. AVILDSSEN. It might be, then, that on the same basis, the cost of producing gasoline from coal would be about twice the present cost.

Mr. WATKINS. My guess—I am not an expert in such matters, but my guess would be that the cost of producing gasoline from coal would be more than twice the present cost, but mine was a general statement applied to these substitute sources, coal and shale and vegetable matter.

Mr. AVILDSSEN. Sure.

The CHAIRMAN. Any other questions? Mr. Stabler, we are very much indebted to you.

Mr. McConnell, did you care to make any comment?

STATEMENT OF MR. ROBERT McCONNELL, SPECIAL ADVISER TO THE SECRETARY, DEPARTMENT OF COMMERCE

Mr. McCONNELL. Mr. Chairman, I have made some notes on this testimony which represent my understanding or interpretation of the testimony that these gentlemen have given us, and with permission I would like to read them.

CONCLUSIONS

Mr. McCONNELL. The Department of Commerce has felt it desirable that the records of the committee's investigations shall disclose more fully the vast economic wastes that are being incurred in the production of crude petroleum in the United States. The facts we have just heard were presented by unbiased and expert technicians of the National Resources Planning Board and the Department of the Interior. They are not shaded or colored by any self-interest. They are in accord with my personal experience; I believe them to be conservative and trustworthy.

We are confronted with the statement that our present methods of operation result in preventable wastes which, in the aggregate, are probably well in excess of \$500,000,000 a year. This waste is in two forms. It is a waste of gas and of oil which remains in the ground and becomes nonrecoverable except at prohibitive cost; and it is a waste of labor and materials.

¹In a letter dated October 24, 1939, to Senator O'Mahoney, Mr. Watkins enclosed a letter from A. C. Fieldner, chief, Technologic Branch, Bureau of Mines, relating to the cost of producing gasoline from coal or oil shale. The letters are included in the appendix on p. 9956.

Dr. Watkins, as an example, pointed out that the waste of labor and materials last year in drilling wells which were unnecessary probably came to some place around \$300,000,000. By that overdrilling and by the system of proration which was set in, or partial proration, there is a further waste in the ground of some 600,000,000 barrels of oil. Those figures are merely illustrative.

The technical leaders of the industry and others have pointed out to the committee that this is a preventable waste; that the industry itself, together with the State regulating commissions, are making slow, painful progress through partial proration and partial unitization toward efficient management of production.

Previous witnesses have shown that one of the principle obstacles to the prevention of waste is the so-called rule of capture, which was formulated 30 years after the birth of the industry some three or four generations ago. This rule of capture probably is a direct descendant from the old whaling-industry law, whereby the first man to get his harpoon into the whale owned the whale. When the rule was laid down judicially, the knowledge and technical understanding of this complicated oil industry was practically nil as compared with the knowledge possessed by the engineers, geologists, and technicians today.

It has been suggested that the major characteristics of unit operation are preliminary exploration in the case of new fields, compulsory pooling of interests, proper well spacing, acceptance of standard development and production methods, and scientifically controlled withdrawals. Unit operation may be established in old pools as well as in new pools. By unit operation is meant the development as a whole of a geological unit according to a definite supervised program, royalties to be shared on the basis of acreage, oil in place, or some general equitable arrangement regardless of the location of the producing wells. The English refer to unit operation as scientific unit control.

This committee has heard testimony that some one-half or more of the annual drilling is unnecessary to produce the oil and gas, and that, furthermore, through wasteful drilling and production practices we have lost and are losing every year hundreds of millions of barrels of oil which will never again be recoverable by any known economical method of extraction.

The problem of unitized drilling is no theory. It is a fact that is practiced most successfully by foreign competitive producers.

The advantage of compulsory unit operation is considered so great that England, in making provision for any possible oil field which may be discovered in Great Britain, has provided in the British Petroleum Regulations of May 15, 1935, for cooperation among lessees of one geological unit, to be effective at first voluntarily, failing which the Government, through the Board of Trade, has the power to require unit operation subject to the right of arbitration.

The CHAIRMAN. How extensive is the application of that principle?

Mr. WATKINS. There is practically no oil produced in Great Britain. They were looking toward the possibility of discovery.

The CHAIRMAN. This rule, then, of which Mr. McConnell speaks, does not apply outside of the British Isles?

Mr. WATKINS. That is my understanding.

The CHAIRMAN. And there is no oil there.

Mr. WATKINS. Practically none discovered.

Mr. McCONNELL. There is a great deal of oil in Persia and Iraq.

The CHAIRMAN. This rule of which you speak doesn't apply to Persia?

Mr. McCONNELL. It applies to Great Britain.

The CHAIRMAN. Where there is no oil, so we can't take that criterion.

Mr. McCONNELL. Have you any figures on production of Great Britain?

Mr. WATKINS. Practically nothing.

Mr. McCONNELL. What is the situation in Venezuela? This rule does not apply there. Is that unit operation?

Mr. WATKINS. There is considerable unit operation in Venezuela, where single-lease holding exists, and likewise in various other parts of the world where that condition obtains.

Mr. McCONNELL. Is there unit operation in Persia—Iraq and Iran?

Mr. WATKINS. Yes.

Mr. McCONNELL. What percentage of the total production would be under unit operation or partial unit operation?

Mr. WATKINS. I can't answer that.

Mr. McCONNELL. Can you answer that?

Mr. STABLER. Not authoritatively. A very large proportion; I think it is safe to say that.

Mr. McCONNELL. Does that answer the question?

The CHAIRMAN. Well, of course, the situation is quite clear. Where the state or the king owns the natural resources, why, of course, this method can be imposed. In this country, however, except for the public domain, the state does not own the resources, so that you are confronted with a theory which runs between two extremes. On one extreme is complete ownership by the state of all natural resources to be managed by the state and developed by the state in the judgment of the state as to what is good for the people. Upon the other hand, you have the theory upon which we have been operating in this country, that the natural resources go with the land and belong to those who own the land, and may be developed by those persons as they please.

Now, we have been developing here a theory of conservation which has been very difficult to make effective, because we have not only diverse individual ownership of lands, but we also have diverse political jurisdiction of the states. There are only two of all the States in the United States which produce petroleum which have a compulsory-unit plan, and some States which produce petroleum have the proration laws. Others which produce petroleum have no proration laws. So we are confronted, therefore, with the question of whether or not it would be desirable to establish a national system for the control of the development of natural resources like petroleum, and that, of course, would go far beyond any of our present political concepts.

Mr. McCONNELL. Shall I proceed?

The CHAIRMAN. Yes.

Mr. McCONNELL. This country is possessed of the greatest oil reserves of the world and also the best labor and brains available anywhere for the production of our oil requirements. Yet, because of our methods of production, brought about by a misconception gen-

erations ago concerning this migratory fuel, we are compelled to erect tariff barriers to prevent the foreign producer from flooding our domestic markets.

Competitive drilling, as brought about by the interpretation of the "rule of capture" and get-rich-quick incentives, calls for a multiplicity of offset wells in place of a few carefully selected wells. In a large percentage of the known fields this practice of offset drilling has caused the failure of most small operators and heavy losses to the major oil companies.

The vast forests of oil derricks which line the horizons throughout the country represent losses that have already been incurred. A substantial part of the oil that underlies those derricks has been lost forever. Nevertheless, there are tremendous economies that can still be effected in these old developed fields. They need not be operated in a manner which will cause further excessive loss of the oil reserves that still remain below them. Proration as practiced today is a makeshift because of the "rule of capture" which has interfered.

At no time in history have a people been blessed with the plentitude and excellence of essential raw material resources such as have existed in this country, and there is no civilized country in history that has been guilty of the great economic crime of waste of resources that is still going on in the oil industry in this country today.

There is undoubtedly a means which can be devised entirely equitable to small and large operators which will permit and compel prevention of this enormous waste. The measures affecting the conservation and prevention of waste should apply uniformly to the entire oil and gas industry in every State in the Union. There is no single service this committee can render in this industry that holds greater promise of present and future profit to our economy.

I thank you.

Mr. WATKINS. May I note for the records that the estimates attributed to me, the estimates of waste, were based on certain hypothetical assumptions which may or may not be reasonable.

The CHAIRMAN. Very good.

It is now 10 minutes after 12, but it was our hope to have Mr. Del Sesto testify this afternoon and to have a recess over Saturday, and if it is agreeable to the committee we will now proceed to hear Dr. White, in the belief that his testimony may be disposed of within a few moments.

Thank you very much, Dr. Watkins.

Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

TESTIMONY OF ALFRED G. WHITE, CHIEF ECONOMIST, PETROLEUM ECONOMICS DIVISION, BUREAU OF MINES, WASHINGTON, D. C.

Dr. WHITE. I do.

The CHAIRMAN. Dr. White, there has been some discussion during these hearings of the Bureau of Mines estimates of current production, and it was suggested yesterday that it would be desirable to have some person from the Bureau of Mines come to the Committee and explain that method. Are you prepared to do so?

Dr. WHITE. I am.

The CHAIRMAN. Will you be good enough to give the reporter your name and state your background, please?

Dr. WHITE. Alfred G. White, chief economist, Petroleum Economics Division, Bureau of Mines. I was with the Bureau of Mines from about 1913 to 1919 and returned to this work in 1936, to date. Shall I go ahead with the statement?

The CHAIRMAN. Yes; if you please.

BUREAU OF MINES' ESTIMATES OF NATIONAL DEMAND AND METHODS USED
IN CALCULATION

Dr. WHITE. The beginning of the national forecasts for oil demand was initiated under the Federal Oil Conservation Board in 1930, 1931, and 1932. These estimates of national demand were made by voluntary committees and with the cooperation of representatives of the Bureau of Mines. During the code period under the N. R. A., from August 1933 to May 1935, the Bureau of Mines compiled data for the Petroleum Administrative Board on the supply and demand of crude oil and its products. Since July 1935 the Bureau of Mines has issued monthly forecasts of demand for motor fuel and crude petroleum.

These forecasts were initiated at the request of various State agencies and later, after its formation, on the request of the Inter-State Oil Compact Commission.

A detailed discussion of the methods used is contained in the Report on Energy Resources and National Policy, prepared by the National Resources Committee and published January 1939.

On page 401 and the two or three pages that follow, a more detailed discussion of the forecasts and the methods used is contained. Very briefly, two or three paragraphs in that report will indicate the primary character of the forecasts. I may say in beginning that these forecasts represent factual data and information compiled for policy-controlling agencies. They do not represent Federal allowables nor are they even recommendations, but primarily are a projection of current competitive trends for the demand for crude oil, and motor fuel adjusted for usual seasonal stock changes. They represent an estimate of the volume of current operations necessary to maintain a reasonable balance between supply and demand, with a view to avoiding unnecessary and wasteful storage of either crude petroleum or refined products.

Senator KING. May I interrupt just one moment? Do they take into account the influence which exports and imports of petroleum and its products would have upon determining what the market requirement was?

Dr. WHITE. The first step is an estimate of total motor-fuel demand, which is a combination of domestic demand and export demand. There are no imports of motor fuel. We subtract from this total demand the natural gasoline which is used which does not come from crude oil. The balance gives us the gasoline required to be produced from crude oil. Then, on an estimated yield factor, we determine the amount of crude runs necessary to produce it, from which we deduct the imported crude, giving a net domestic crude run required, to which we add exports of crude and fuel and losses, making a total demand for domestic crude.

In other words, we deduct the natural gasoline and the imports of crude oil to arrive at the net amount of domestic crude required to meet all demands.

Senator KING. You would have some difficulty now, would you not, in projecting yourself into the immediate future, or over the next year, to determine the demands for crude petroleum?

Dr. WHITE. The forecasts are primarily monthly, and represent a short-term projection of available information relating to seasonal production, stocks, sales, and consumption. We get in connection with the export situation reports on expected exports by all important exporters. We have to make some allowance for possible spot business, and we may be wrong at times. Certain months—for instance, in September probably the shipments have not been made in some cases, but may be made in October or November. When we estimate for a given month, there is always the possibility of a shifting forward or backward of projected exports. It seems fairly clear from the current evidence that as yet no substantial increase in exports over last year is expected through October and November. Now it may materialize in late November or after that period.

Senator KING. Have you had accurate information respecting the shipments of oil from Mexico to Germany and to other countries?

Dr. WHITE. Those data come out rather slowly. We do not use that in our own forecast work. That is part of our international petroleum work, to collect data as soon as they are available of exports from foreign countries to the European countries.

The CHAIRMAN. When do you make your estimate, and for what period?

Dr. WHITE. We have just made—it will be out this morning—a forecast for demand for this coming November. It is the middle of this month for the demand of the coming month.

The CHAIRMAN. Does that include any estimate of exports from this country to Great Britain and France?

Dr. WHITE. It doesn't detail it by countries. It includes an estimate for total gasoline exports and total crude-oil exports.

The CHAIRMAN. But the exports to those two countries have been included in your estimate?

Dr. WHITE. They have been included. Of course a good many of our exports are to other countries. Canada is a large consumer, and we don't attempt to break it down by countries. We attempt to get the estimate of the total exports of gasoline and of crude oil in order to balance our estimates of the total amounts required.

The CHAIRMAN. Has the outbreak of the war had any effect on that estimate of exportation?

Dr. WHITE. Not as yet. The exports of the last quarter of 1938 were extremely high. They included undoubtedly war stocking, or more than were necessary for consumption. So far indications are that exports in this last quarter will not probably exceed those of last year.

The CHAIRMAN. In making your estimate to date you have not specifically taken into account any change, if any change has taken place, in the exports of gasoline to Great Britain and France or any other European country on account of the war?

Dr. WHITE. We have a very slight increase over last year's figures, and those are based on reports from all the main exporters of what they expect to export in November.

The CHAIRMAN. So that unless those exporters have taken into their account the requirements, the excess or increased requirements due to the war, you haven't taken them into account.

Dr. WHITE. We have to add a certain amount to the estimates we get for spot business. Almost always reports we get are really contract business—assured business.

The CHAIRMAN. Have you added anything on account of the war?

Dr. WHITE. We have added a very small amount, but the shipping is so disturbed that those readjustments have not taken place yet. They may by December or later. In other words, we use all the facts we have and the best judgment we have in estimating these items after contacting all the people who have specific information on business that has been contracted for.

The CHAIRMAN. Who are these people who have this specific information?

Dr. WHITE. I think we get reports from some twelve to fifteen companies who do most of the export business. It is a relatively limited field.

The CHAIRMAN. Do you have any independent sources of information?

Dr. WHITE. Nothing except the usual seasonal factors and the current trends during the year.

The CHAIRMAN. And you rely, then, in making your estimates upon the reports which are received from these companies which control the exports.

Dr. WHITE. Modified by our own general seasonal trends and the conditions during the months preceding the immediate month we are dealing with. We take no figures direct. We use those as evidence to combine with all other information we have to estimate as nearly as possible what the set-up will be.

Mr. O'CONNELL. From what sources do you get your information as to domestic consumption?

Dr. WHITE. Domestic consumption of gasoline has very definite seasonal relationships and is closely related to the total number of motor vehicles in operation and the consumption per motor vehicle. It is very difficult to correlate real consumption data with sales data. A good deal of the data we get is sales data. There are stocks that we know nothing about. We have bulk terminal stocks of gasoline, but when gasoline passes into the hands of the retailer no one has any record of just what those stocks are. If prices apparently are going up or down, it may stimulate or reduce sales, as the case may be, so that sales are much more variable than consumption is, probably; that is, sales to the final retailer. We oftentimes get very unexpected figures for a given month which are usually balanced by the next month.

If sales are high this month, they will be low next month as that gasoline is used up.

Mr. O'CONNELL. I was interested for the moment from what particular sources you derived your information.

Dr. WHITE. That has to be based on the general factors of motor-fuel consumption.

Mr. O'CONNELL. Do you get reports from particular companies?

Dr. WHITE. We collect practically all of the monthly and annual figures that are collected in the oil industry relating to production and

stocks—that is, we ourselves have production and stock figures, which we combine and publish on a national basis each month.

Mr. O'CONNELL. You still don't understand me. You attempt to determine a figure which is supposed to be an estimate of the consumption of gasoline, I understand. From what sources do you get information which assists you in arriving at that figure?

Dr. WHITE. In the first place, there are the usual seasonal trends. Consumption varies greatly in different periods of the year. It has been running this year at a rate of about 6 percent above last year fairly consistently.

Mr. O'CONNELL. You still are not answering what I have in mind.

Dr. WHITE. I think I am coming to what you have in mind. You have to project usual seasonal trends first if you are considering consumption. We use a business index which has a certain amount of influence, though gasoline consumption usually does not follow a business index as closely as some other operations. As the business index goes down gasoline consumption generally lags. It doesn't go down quickly as a business index does. As the business index comes up gasoline comes up more slowly. Gasoline consumption is a much more stable factor than almost any other line of consumption. It is affected less by change of conditions, and therefore the changes are fairly gradual. Then we have monthly figures, the latest available figures, on the number of motor vehicles in operation.

Mr. O'CONNELL. You have those figures, but where did you get them?

Dr. WHITE. The registrations are compiled from State and other data monthly. Generally there is 1 or 2 months' lag in the set-up, but they are published figures of registrations and changes from which we can compute the number of motor vehicles in operation.

Mr. O'CONNELL. They are figures compiled by State agencies?

Dr. WHITE. They are based partly on State registration figures and on automobile sales figures. It is a combination of those various figures. Of course, primarily you take estimated rates of withdrawal of cars and sales figures of new cars and compute the total probable number of motor vehicles in operation.

Mr. O'CONNELL. Specifically you take a sales figure on new cars. Where do you get the figure? From whom?

Dr. WHITE. From the general publications of the automobile association.

Mr. O'CONNELL. From the publications of the automobile association? That is one source of information. What are some of your other sources of information?

Dr. WHITE. Well, that pretty well covers the question of domestic demand when you have your motor vehicles representing 85 percent of the total consumption. Those things proceed on more or less regular seasonal rates and operations. There is not nearly as much differentiation as anyone would think in that set-up. Our estimates of total motor-fuel demand in 1938 were only 2,000,000 barrels off, or one-half of 1 percent.

Mr. O'CONNELL. Off of what was actually consumed?

Dr. WHITE. Yes.

Mr. O'CONNELL. Where did you get the figure of what was actually consumed in 1938?

Dr. WHITE. That is the figure we compile from the total production of gasoline monthly, change in stock—

Mr. O'CONNELL (interposing). Where do you get that?

Dr. WHITE. From the refining companies. We have reports from some 200 refiners, which practically covers the whole refining industry and gives us monthly figures of production and stock changes.

Mr. O'CONNELL. That is what I was getting at. You get from 200 refiners the amount of their production month by month by voluntary arrangement?

Dr. WHITE. Yes; by voluntary cooperation.

The CHAIRMAN. Do you get any other information from the companies besides their reports on consumption?

Dr. WHITE. Well, we have pipe-line receipts of crude, which cover approximate crude production, we have changes in crude stocks, the total runs to stills, and various products produced each month, which balanced out the refinery output, then for each major product the stocks for gasoline, kerosene, and other products, from which we get a figure that approximates the total demand. The Bureau of Foreign and Domestic Commerce collect figures on exports.

The CHAIRMAN. How do you get the figure on total demand from the figure on production?

Dr. WHITE. Production plus or minus changes in stocks of that particular product. It shows the total amount that has gone into a market. Then if you subtract from that the exports you get the domestic demand.

Mr. O'CONNELL. At that point, though, you have merely ascertained what the effect of demand was during a particular period.

Dr. WHITE. Yes. I was adding to it the previous discussion. That gives us the latest current data.

Mr. O'CONNELL. That gives you the current data as to what happened during the previous consumption.

Dr. WHITE. We have current figures in the industry that are a little more up-to-date on that situation. The American Petroleum Institute collects figures on refinery operations and gasoline production and gasoline stocks by weeks. We have crude oil stock changes by weeks, and there are various agencies that collect production figures, so you can make a current balance within almost a week's time of the latest trend in developments. We test those figures. They are oftentimes off somewhat, but they give you the trend. In other words, I have the approximate trend of oil demand for the first 2 weeks in October at the present time, and the motor-fuel demand. They don't always check up with our monthly figures, but the discrepancies are not so great but that you approximately have at the present time an indication of the trend of October demand. When you get into November demand you have got to consider all of the factors that are available to finally make an estimate of how abnormal or normal November is going to be, so for last year we look at the curves of the trend for this year, the latest current information, and estimate what is going to be the demand.

Mr. O'CONNELL. How do you use the price factor in that estimate?

Dr. WHITE. The price factor has very little to do with the demand for gasoline.

Mr. O'CONNELL. It has very little to do with it?

Dr. WHITE. Very little.

Mr. O'CONNELL. Is that another way of saying the demand for gasoline is inelastic?

Dr. WHITE. You must keep in mind these are monthly forecasts. The change or alteration of a half a cent a gallon in the refinery price of gasoline or even 1 cent will not affect consumer demand to any extent in a short period.

Mr. O'CONNELL. On what do you base that? I am interested in the topic because I have heard people positively refute that.

Dr. WHITE. Well, if you check out curves of price changes, of course things of this kind are hidden by general upward movements in demand. It is hard to tell exactly, but there has been no evidence in checking general price changes that curves of gasoline demand have any material influence. There are other factors that are far greater than that and obscure any smaller effects that such a change would have. In other words, most people operate motor vehicles and are going to continue to operate those motor vehicles with very little differential unless there is a major change in price, which does not occur in short periods for which we are forecasting.

The VICE CHAIRMAN. In other words, if a person aimed to go somewhere when oil was worth 15 cents, if it got to be 16 cents he wouldn't stay at home.

Dr. WHITE. He wouldn't stay at home and I don't know of any such changes that take place in a month's time. We are estimating monthly demand. You have had frequently a quarter- or a half-cent differential, all of which is not necessarily passed on to the consumer. It initiates in refinery prices, but the price changes are not sufficient to affect short-term demand. There are a great many other factors that are much more important. They will affect speculative sales. That is, if the final dealer expects the price of gasoline to go up, he may buy a little sooner before the price goes up. I was talking primarily about the final consumer, while a speculative sale in a given month may be affected by an anticipation of a price rise or he may postpone buying if he expects a price fall. That is, the retailer's sales vary and fluctuate with that. That is a factor we find it difficult to anticipate, and oftentimes it means that in one month the sales will be higher than expected, but that oil is used up in the next month and the 2 months will average out. It is very difficult to pick on any given month and absolutely estimate the demand in that month, because many of the factors are speculative and unexpected sales factors. But actual consumption is probably much more stable than monthly sales. What we get in our figures that we collect is primarily refinery sales, because if you take refinery production and a change in refinery and bulk terminal stocks, the difference is what has passed into the market, and it is primarily a sales factor, which is much more variable than a monthly consumption figure based on automotive use, which is fairly stable and moves slowly upward or downward.

Senator KING. Over a given period of time there is a substantial relation, is there not, between the production of petroleum and the production of gasoline?

Dr. WHITE. You mean quantitatively?

Senator KING. Yes; quantitatively?

Dr. WHITE. That over a long period changes materially. During the World War, from 1914-17, the yield of gasoline was about

one-half what it is at the present time. In other words, you had 20 to 21 percent gasoline yield from a barrel of crude in 1914; now it is approximately 44 to 44½ percent, which means that other products influence the amount of crude required, less than they used to, but they are still factors, and we generally make a balance of other product requirements, a forecast which we don't generally publish, but in order to determine the yield of gasoline we have to estimate how much heating oils and other products will be required.

Senator KING. You have reasonably accurate figures from the various channels to which you have referred, of the petroleum production by the month and by the year, and you have reasonably accurate information as to the use to which the crude petroleum is devoted, how much to gasoline and for other petroleum products, and you have reasonably accurate figures as to the quantity of crude on hand and the amount of gasoline on hand, the disparity between production of crude and the production and consumption of gasoline, so that with all these sources of information you think your figures are pretty accurate.

Dr. WHITE. I may say this, that they are, I believe, more accurate than anybody else's figures. To forecast anything is a difficult undertaking, but we collect all of the forecasts that independent engineers or economists make. We go out of our way to find out what other people are forecasting. We primarily make our own forecasts on our own methods, but we check with what other people are thinking and all other sources of information. We are all wrong occasionally.

Senator KING. As far as I am concerned I think you have demonstrated your competence.

Representative WILLIAMS. Through the years that you have been operating how nearly has your forecast conformed with the facts after they were shown? I believe you gave 1 year, last year, was it, that you showed one-half of 1 percent off.

Dr. WHITE. There are different factors involved in the forecast. First is a forecast of gasoline demand, which is properly added on a cumulative basis, that is, there are no variables, so that in those estimates, roughly speaking, we have been issuing forecasts for approximately 3 years now, and in 1936 our gasoline forecast was 9,000,000 barrels or approximately 2 percent under the actual. In 1936 there was a period of very rapid market expansion; that is, demand was going up so rapidly that it was very difficult to catch up with actual demand in making these forecasts 2 months ahead of any available data. In 1937, you had a sharp break in demand, a depressed condition at the end of the year, so that our forecast was about 6,000,000 barrels in excess of a 558,000,000-barrel market, or, roughly, 1 percent over. You see, we were 2 percent under in 1936, about 1 percent over in our estimate of demand in 1937, and in 1938 we were one-half of 1 percent under. So far this year I should imagine that we will run certainly within 1 percent. There were some months that were very highly variable, but I think we are doing better probably than we did last year on the whole, and that the differential will be certainly under 1 percent at the end of the year in estimating total motor-fuel demand.

Mr. O'CONNELL. Isn't it entirely possible that the forecasts which you make have to some extent an effect on demand?

Dr. WHITE. Absolutely not.

Mr. O'CONNELL. Well, to the extent that the forecast is used as a measuring stick for controlling the production, and to that extent bringing the supply in line with the hypothetical demand, it seems to me entirely possible that to the extent demand is influenced by price your forecast is pulling itself up by its bootstraps, so to speak.

Dr. WHITE. Primarily, the object of the forecast is to furnish to States who have control agencies an approximate estimate of the demand of crude oil from their States. We do not estimate changes in crude stocks or production. We estimate the demand, for instance, for Oklahoma or Texas oil in this given month. Now, the States takes that figure purely as information. There have been times when the States decided our estimates were low and they wanted to build up those stocks, so they had larger allocations; there were other times when they wanted to definitely cut stocks. We estimate the market demand on the basis of competitive trends between States. The State allowables may go above it or below it. They are policy agencies who themselves determine whether they want to produce more or less than the best estimate we have of what demand for oil will be.

Mr. O'CONNELL. Do you break your estimate down by producing States to indicate what the allowable will be in that way?

Dr. WHITE. For crude oil; that is the primary purpose of the whole thing, to produce an estimate for the demand, market demand for crude oil for a given State.

Mr. O'CONNELL. You mean you only give the amount of crude oil that will be used in a particular State, or an amount that should be produced in a given State?

Dr. WHITE. It is the demand for crude oil of State origin, or Texas crude oil or Oklahoma crude oil as a part of a national demand. We take up the gasoline demand to determine national demand and then we arrive at a national demand for domestic crude oil, which means we break down the estimates for the demand for crude oil by States of origin, where it is produced. We don't set up a production figure because demand can be met from either production or from stocks. At one time we made some estimates of changes in crude stocks, but since I believe October 1936 we have made no estimates of crude-oil stock changes. That is a policy matter which we leave up to the agencies that use our estimates.

Now, in order to get at the forecast of crude demand by States, we get reports from each refinery district of their receipts of crude oil by States of origin, for refining, and we have approximate figures of exports by States that we can check up trends. One refinery may be taking more oil from this State gradually and less from other States. We project trends of these receipt figures which show the sources of crude oil in each important refinery district to determine the changes that are taking place in the use of oil from given States in the districts, and add them up as a total, which gives a trend of the demand for crude oil by States of origin; and we have figures of stocks of crude oil by State origin, so that we can balance production by States against stocks of State origin to determine demand for crude oil by States, and it is that set of figures which we use in making these estimates. We break down this national figure into subdivisions by States of origin. That was primarily what led to the forecasts, the desire to get some general idea

at least of what the trend of demand was for oil in Oklahoma or Texas, or some other State. Obviously, any State agency that was considering any balance between production and consumption would have to have some idea of what the demand would be. They had no method of getting it themselves, and that is the service that this forecast renders. They take that information and do what they please with it. They follow it sometimes or they disagree with it. That is their prerogative. We don't set up any allowable. We simply say this is the best statement from all the facts in our possession of what the demand from your State is going to be. Here is the information.

Mr. O'CONNELL. Then you consider the service you render as an aid in bringing production in oil-producing States in line with consumption?

Dr. WHITE. Now that depends entirely on the State policy. We don't consider anything at all. We furnish the information to the States.

Mr. O'CONNELL. For what purpose do you furnish the information?

Dr. WHITE. At the request or for the information of the States.

Mr. O'CONNELL. For what do they use it?

Dr. WHITE. That, as I say, in answering your questions, depends on how they use it. If they use it for that purpose—

Mr. O'CONNELL (interposing). "If they use it"—for what other purpose would they use it?

Dr. WHITE. Actually in determining their policies they sometimes increase production on their own initiative and sometimes decrease it.

Mr. O'CONNELL. But to the extent that your estimates are useful, I take it they are useful in connection with controlling production.

Dr. WHITE. With the adjustment of production to demand; yes.

Mr. O'CONNELL. So that the function of the Interior Department in this regard is to facilitate oil-producing States in controlling production.

Dr. WHITE. Yes, I might go one step further—I think your other question implied it—that the control of crude production so far has had very little effect as a restrictive factor in refinery operations, that when you come to the production of refined products, even in this production holiday in August refinery operations were higher than at any previous time; that is, the adjustment of crude production doesn't necessarily mean that you adjust the supply of refined products. If crude production was so low and stocks were so low that crude was not available, it might, but that point has not been reached.

Mr. O'CONNELL. I am still primarily interested in what you conceive to be the function of the service you render to oil-producing States and others. Do you consider it has a conservation function or what sort of function has it? We are agreed, I think, that when used by oil-producing States, your estimates are used for the purpose of controlling production of crude in those States. Now, from the point of view of the Interior Department, has your service any other function?

Dr. WHITE. It is primarily a conservation function related to the prevention of the unnecessary production of oil above market demand, and that whole situation has changed largely because the

amount of storage necessary has changed because of so much shut-in production. The whole trend of those factors is changing.

Mr. O'CONNELL. Right at that point, we may not be speaking of exactly the same thing when we are speaking of conservation. Do you conceive the proper function of conservation to prevent more oil being produced at a given period than would be sufficient to meet your market demand as estimated?

Dr. WHITE. No; I wouldn't quite say that; to prevent oil from being produced that might have to go into wasteful and unnecessary storage over a long period.

Mr. O'CONNELL. You are speaking of conservation now as meaning something more than the prevention of physical waste in the production of crude oil.

Dr. WHITE. In the production. There is also waste in storage.

Mr. O'CONNELL. You are speaking of waste in storage. Is that the conservation function that you conceive you fill?

Dr. WHITE. That is primarily the presumption, that the forecasts are an indication of what the demand is, and then I think the general policy of the States in relating their conservation measures to market demand has been the principle of not producing oil until it is required, until it is wanted.

Mr. O'CONNELL. I understand that that is generally the policy of the oil-producing States, and I am merely interested in the policy of the Interior Department in facilitating that policy. I take it that that has nothing really to do with conservation as such, meaning by conservation the prevention of physical waste.

Dr. WHITE. Well, if you want to indicate that the Interior Department, in complying with the requests of these State agencies for this information, in a sense is aiding and facilitating their efforts at State conservation, without any question that is true. We assume that this type of information is one of the necessary facts, not necessarily a primary fact; that is, theoretically, conservation might be based on the best engineering practices. Practically, demand might be such that oil would be produced irrespective of engineering practices, but where there is an abundance of oil, more than is necessary, this is a starting point I think in any proposal of any kind in conservation; the relation of production to demand is an important consideration. It may not be a major one, by any means, but it is in a sense a starting point. You have got to have some idea of whether your production is in excess of demand, and then whether that excess production will cause wasteful storage or wasteful methods in its production. I look upon the question of demand as fundamental information but not necessarily a controlling factor.

Mr. O'CONNELL. Is that information made available or collected pursuant to any particular legislation?

Dr. WHITE. Not directly, except in the enabling act of the Bureau which permits it to publish information of any kind, and more or less indirectly by congressional action in providing appropriations for the expansion of work necessary in connection with these forecasts in certain crude-oil products and other work that has been done.

Mr. O'CONNELL. It is a matter of administrative policy.

Dr. WHITE. It is a matter of administrative policy that comes directly under the authorization of the Bureau work, and funds for which have been specifically supplied by Congress.

Mr. AVILDSSEN. About how much does it cost a year to supply that information to the oil industry?

Dr. WHITE. You mean the total statistics that we collect? Of course, these forecasts are in a sense a byproduct of the work which we are doing.

Mr. AVILDSSEN. The collecting, the forecasting, and so forth—just a rough figure.

Dr. WHITE. I can't break it up into forecasting. We collect an enormous amount of statistical material in all aspects of the oil industry. I believe our appropriations for this division are in the neighborhood of \$55,000 to \$60,000 annually.

Mr. AVILDSSEN. Collecting and forecasting?

Dr. WHITE. For all of the work of the division, which employs about 20 people, most of whom are engaged in statistical work. We have field offices in California. That includes the California statistical work, and also in Oklahoma. But as for our entire work which has been carried on for years, practically, we have one man who spends most of his time in assembling the figures for the forecast work and even he is our motor fuel specialist who answers many inquiries and other work on motor fuel.

The CHAIRMAN. Are there any other questions? Mr. Snyder? Mr. Berquist?

Mr. BERQUIST. No.

The CHAIRMAN. I wonder what exact considerations were before the Bureau when this policy was adopted to induce the Bureau to undertake furnishing this information.

Dr. WHITE. Well, I think I may say in that connection that the consideration of national forecasts of demand as a part of the oil conservation movement has been in the situation since its beginning under the Federal Oil Conservation Board in 1930. It has been recognized that any planning of the relation of supply and demand required at least a national forecast. Then when the State Conservation Acts were passed, it became necessary to break a national forecast into demand by States for information for their purposes. In other words, it has been a gradual extension into greater detail, but that idea seems to have been initiated very early in any discussion of a national conservation program.

The CHAIRMAN. Then it was considered desirable to determine what the demand should be in order from the point of view of conservation that the production could be kept in line with that demand?

Dr. WHITE. That is absolutely the first necessary consideration.

The CHAIRMAN. I mean that was actually before the Bureau when it was undertaken.

Dr. WHITE. Yes. Of course, the Bureau in undertaking this work really was performing statistical services for the Petroleum Administrative Board under the N. R. A. We had the facts and supplied them with data but they being a policy and control agency, used those facts as they saw fit but it was necessary to have those facts and to develop more facts than were available.

The CHAIRMAN. Do I understand this was not undertaken until N. R. A.?

Dr. WHITE. Not in the present detailed form in which it is found. It really initiated from August '33 to May '35, and then when the code period ended, the Bureau was about to abandon that work.

The CHAIRMAN. What general detail now involved was not present before 1933?

Dr. WHITE. We had no data to determine accurately the demand for crude oil by States. We had production, but we had no details of stocks by State origin. We had no movements by States of origin to refinery districts. We couldn't determine whether it was used. You might get it in a year's set-up, but we had to develop a great deal of detailed information, and also further information on the interregional movements and on details of gasoline consumption.

The CHAIRMAN. What factors actually enter into your determination of consumption? First, of course, you mentioned the number of automobiles which you compute from the automobile association figures, and then you had your reports on production from the various refineries. Were there any other factors?

Dr. WHITE. We have special export reports that we get on the export situation. In connection with the automotive traffic we get reports of traffic over a great many major bridging routes in the country which is a fair indication of traffic itself. In addition to that we have a set of reports which show the receipts of crude at refineries by origin.

The CHAIRMAN. Do you have any prospective information of any kind from any source as to what the development is likely to be?

Dr. WHITE. We collect from all of the people in the industry that we know give any attention to the trends of demands, their own estimates; the independent engineers and company economists. In other words, so far as we know, anyone who is engaged in the forecasting operation, we check their estimates of various parts of this set-up.

The CHAIRMAN. So your estimate is not based solely upon actual data as to past performance, but includes also estimates from the trade with respect to future demand.

Dr. WHITE. Yes.

The CHAIRMAN. Now what is the relative importance of those estimates as compared with the factual data on past performance?

Dr. WHITE. That is a very difficult question to answer because in forecast work of any kind you have to take all of the information from any source that is available and finally make up your own mind as to what the best set-up is. The projection of statistical curves won't do it because oftentimes events don't follow the projection of past curves.

The CHAIRMAN. In determining to what extent you will allow weight to the estimates of companies engaged in the petroleum business as to future consumption, how are you guided in that?

Dr. WHITE. The variation in those estimates is such that you wouldn't give weight to any single one of them. In other words, we collect data. They are not all company by any means, there are some independent organizations and associations, and you get a very unexpected variation in the estimates of different people who forecast.

The CHAIRMAN. Does the Bureau have any regard whatsoever for price in making its estimates?

Dr. WHITE. I should say that in short-term forecasts there is no relationship to price involved.

The CHAIRMAN. How about long-term forecasts?

Dr. WHITE. We don't make long-term forecasts.

The CHAIRMAN. I wondered why you make that distinction.

Dr. WHITE. It is a monthly forecast. In other words, we are forecasting the middle of this month the demand for next month and not for 6 months to come. It has not been practical to do that. Market conditions have been such in the last year or two that past performance may have very little relation to what is happening.

The CHAIRMAN. Can the committee understand that so far as the Bureau of Mines is concerned it does not take into consideration the effect of its estimates upon price?

Dr. WHITE. I think that could be said to be absolutely true. The only possible factor that might be involved is the fact that we have to make seasonal estimates of certain refined stocks. They go through seasonal changes. If the stocks of gasoline are excessive, that is build up in winter higher than they normally would, we have to take a greater seasonal reduction than normally would take place. Obviously that high stock might affect the price of gasoline. We look upon any stock recommendations as reducing to a reasonable and normal position of day's supply in the industry. In a sense, excess inventories may affect the price temporarily, but in a monthly forecast we follow seasonal patterns of usual performance in reducing those stocks.

The CHAIRMAN. Then you conceive it to be the function of the Bureau of Mines to furnish this information first because it is a matter of information within your knowledge which you can gather under your organization, information which is desired by various State agencies clothed with certain functions by law, and, secondly, you recognize it as a desirable factor in promoting the conservation of oil.

Dr. WHITE. Yes, sir.

The CHAIRMAN. And you are not concerned about the effect of this upon price.

Dr. WHITE. No, sir.

Mr. BERQUIST. In August during the shut-down was production in excess of the Bureau of Mines' estimates?

Dr. WHITE. It couldn't have been in excess.

Mr. BERQUIST. I mean at the time the shut-down took place, were they running in excess of the estimates?

Dr. WHITE. I couldn't tell. You are talking about production, not runs to stills.

Mr. BERQUIST. Production of crude oil.

Dr. WHITE. That is a weekly factor upon which we have no statistics except as we take them from published sources. We don't collect weekly production figures. We use other people's figures for that. Of course, our month's production, which included 2 weeks of shut-down showed a 25-percent reduction in total production. For the 2 weeks oil production was cut 50 percent, which made the monthly production a quarter below normal and there was a reduction of 32,000,000 barrels of crude oil stocks in August, most of which was associated with that shut-down period.

Mr. BERQUIST. Colonel Thompson indicated that they used Bureau of Mines estimates as a basis for setting up State allowables.¹ I was

¹ Testimony of Col. Ernest O. Thompson, member, Texas Railroad Commission, on the administration of proration, appears in Hearings, Part 15.

wondering what the production was in the State of Texas as compared with the Bureau of Mines estimates of demand, whether production had run greatly in excess of estimates or not for the State of Texas.

Dr. WHITE. Roughly, I should say that—this isn't a monthly figure, necessarily. You are speaking just about the August situation?

Mr. BERQUIST. Yes.

Dr. WHITE. I haven't the detailed figures by weeks before me, so I can't tell just what it is. But my recollection is for the last 2 or 3 months Texas has been somewhat below the Bureau's estimated market demand in its production. I haven't the detailed weekly records, and they are not our records in any case, when it comes to weekly figures. The only figures we recognize primarily as our figures are monthly figures, which sometimes agree with weekly figures or sometimes disagree to some extent.

Mr. O'CONNELL. Would it be fair to say that the estimates, the breakdowns, which you make by States, of crude-oil production, have no substantial utility except to implement State proration laws?

Dr. WHITE. Well, I wouldn't say that. I assume that in determining the source of production and the source of marketing of the product of any State, it has an equal value with any market studies which attempt to show interstate movements and distribution of products within the States. That is, we can give a pretty complete picture of the interstate movement of crude oil from production to refinery point, which I think in itself is a very valuable factor, because it is indicating the general layout and changes that are taking place in industry set-up.

Mr. O'CONNELL. Do you think you would make that break-down where there are no proration laws?

Dr. WHITE. We would make it now. We would continue. I think the industry has come to appreciate that information to the point that it would be continued whether there was State proration or not. There are a great many other people who are using these data besides the States, and they are primarily interested in the estimates of the coming demand and then checking back on the figures of past months.

Mr. O'CONNELL. Let me put it this way. When you first made the break-down by States, which was, I take it, in 1936 or thereabouts, what was your purpose in making the break-down by States at that time; was it not to implement State proration laws?

Dr. WHITE. Well, that break-down was started somewhat before that. It was initiated beginning with the code period.

Mr. O'CONNELL. I understood you didn't make the break-down of States until N. R. A.

Dr. WHITE. That was in the first forecasts of the Federal Oil Conservation Board in 1931 and '32. The break-down by States was not made until the code period was started.

Mr. O'CONNELL. At the time it was started did you know any useful purpose it served except to implement the proration laws?

Dr. WHITE. At the time it was started that was what it was started for. As to whether there were other values besides that, you have to keep in mind we collect this data with the voluntary cooperation of the oil companies. We have no mandatory powers of collecting statistics, and most of the data which we collect has been

developed on the whole as data which they were interested in and wanted on the national production and distribution of oil and its products, and I would say that probably the petroleum industry has more extensive statistics and more current statistics than any other industry, and that primarily that data is of use to the people in the industry.

Mr. O'CONNELL. As I understand you, when the practice of breaking down your oil production by States was initiated it was for the purpose of implementing State proration laws but now it develops that it has other uses.

Dr. WHITE. Yes. Of course, part of the data was already available, just supplemental data to finish the job. We had stocks of crude oil, but we broke it down by districts, not by States of origin. I mean we just went one step further, which furnished a little more information than data already collected.

Mr. O'CONNELL. But for the purpose of implementing State proration.

Dr. WHITE. Exactly.

The CHAIRMAN. What factors enter into your assignment of allotments to various States? How do you determine, in other words, what shall be assigned to each particular State?

Dr. WHITE. It is primarily on a moving percentage basis of total demand. That is—

The CHAIRMAN (interposing). The sum of the allotments to each State will equal the estimated total demand?

Dr. WHITE. Yes. Now the total demand is affected by gasoline demand, gasoline stocks, and other factors, but once having fixed a national demand for crude, made up of runs to stills, exports, and other uses of crude, that figure is allocated on the basis of moving percentage trends of demand, the use of State oil at different refining districts.

The CHAIRMAN. Testimony was given here by Mr. La Fleiche a few days ago that production in Wyoming does not equal the estimate of the Bureau of Mines. The testimony from Texas would indicate that production in Texas has sometimes exceeded the estimate of the Bureau of Mines. Do you then keep any record of the agreement or lack of agreement between actual production in these States and your actual estimates?

Dr. WHITE. Let me clarify that. We do not make an estimate of production. We make an estimate of demand. Take Wyoming, for example. They have a pipe line that is moving oil to points further east. Part of that oil is new production, part of it is accumulated storage that is being reduced. Our estimate is the total demand for Wyoming oil, includes production and that stock reduction; therefore, any production figure where they are liquidating stocks would be less than our demand figure. Our demand figure runs fairly accurate for the State of Wyoming, but part of that demand, as we point out in our forecast, can be met from production. We don't estimate production. So much crude oil of Wyoming origin is wanted. It may be taken by the companies or anybody concerned from stocks, or it may be new production. We don't distinguish where it shall be taken from.

The CHAIRMAN. I understand that, but I was wondering whether there was any relationship to production.

Dr. WHITE. Not necessarily. It depends on whether stocks are going up or down.

The CHAIRMAN. Is there any relationship to the actual amount shipped out of the State?

Dr. WHITE. Not to the amount shipped out of the State, because it may go into intrastate refinery or to an outside State.

The CHAIRMAN. All right, adding the intrastate uses with the interstate uses, do you keep any account of relationship of these uses, the total uses, with your total estimates?

Dr. WHITE. We do.

The CHAIRMAN. How do they compare?

Dr. WHITE. They are fairly accurate on the whole—let me make this point which prevents a very accurate addition of 12 monthly forecasts of total market demand for crude as a whole or by States. You have this peculiar seasonal accumulation of gasoline stocks. They rise some 20,000,000 barrels each winter because you have to produce heating oils and run more crude to stills than you need and therefore the excess gasoline is built up and is used the following summer. You take gasoline demands, those we can forecast fairly accurately. We have thereafter to estimate changes in gasoline stocks along seasonal lines. Even if stocks are already too high, we have in November, December, January, February, and March, increasing gasoline stocks, whether they are needed or not. We may estimate a build-up in that period which may or may not take place. Supposing the increase in stocks is several million barrels more than we estimate is necessary. We have to change our further figures. That implies less runs to stills than we originally estimated.

You have more gasoline than you anticipated and it must be marketed later, therefore the runs to stills would be less. That is, in any set-up that goes on a month-to-month basis with moving stock conditions, if stocks are obviously too high the usual seasonal decrease would be increased somewhat. We estimate ahead of time what may happen. If it doesn't happen we have to keep cumulatively correcting the later estimates; therefore, our total demand would generally have a tendency to be less than the one we originally intended when you add it by months. In September, if you end with several million barrels more of gasoline than you need, you are going to estimate a reasonable reduction in September that isn't really normal, to correct that situation before you enter the next winter when it is inevitable that stocks are going to go up again.

The CHAIRMAN. Take two adjoining States. How do you determine from month to month how you shall change the estimate for each of those States?

Dr. WHITE. That is primarily based on the trend of demand in different refinery districts. Some districts seasonally go up or down, for instance, Gulf Coast Texas refineries are steadily increasing in the total runs to stills and total output, other refineries are losing part of their markets and their runs.

The CHAIRMAN. But that information you secure in the manner already described from the companies and the automobile sources.

Dr. WHITE. Well, there is one factor, there is a certain element of difficulty and some inelasticity that has been pointed out in these forecasts, if you estimate the demand in a given date for its output

and they should use that demand figure as an allowable, the question is, if the demand is larger, how could they meet it? If there are any accumulated stocks of Texas or Oklahoma oil, as the case may be, the demand would be met by withdrawal of stocks and we would pick up these figures, our estimated demand would keep on moving upward. If you take such a State as Illinois just coming into the picture and whose production expands by leaps and bounds, obviously nobody can anticipate how far they are going to go up in 2 months' time. Practically speaking we are just about 2 months behind what is happening in Illinois. The current situation indicates so much demand for Illinois oil. It may go up tremendously in the next 2 months. We may still be 10 percent behind. But you can't go beyond a certain point in a new set-up of that kind. In cases of any stabilized production with plenty of stocks of State origin, if your estimate was a little too high stocks would accumulate, if the estimate was a little too low they would draw from stocks.

There is elasticity for every situation except where a new development goes forward by leaps and bounds. If the State were really prorating under those circumstances they would have to use their own judgment if they thought there was a legitimate demand which was ahead of our estimate. That is one of the limitations of the estimate, where State policy and State judgment come in. If they think our estimates are too low they go above our estimates. If they think they are too high they may cut a little under them. It isn't our function. We are giving the best estimate we can of the trend of demand. If the State disagrees with us, if they have a control agency that is their function, it isn't our function. Our function ends when we perform the best service that we can which admittedly has to be based on estimates and collection of as much data as is available, for which work we are in a better position probably than any other agency or individual in the country, because we have the complete data and detail available in our offices.

Mr. O'CONNELL. Speaking of Illinois, how have your estimates worked out in Illinois?

Dr. WHITE. Roughly, 2 months behind the actual demand.

Mr. O'CONNELL. Taking a particular month I take it you have not been able to predict the production of crude oil in Illinois with any degree of accuracy.

Dr. WHITE. We get production figures but we don't know how much of it is going to be used or going into stock. Our figure is a consumption demand.

Mr. O'CONNELL. You have a figure allocated to the State of Illinois per month. How close is that figure to being accurate?

Dr. WHITE. The latest current data for Illinois indicate a consumption of 319,000 barrels a day. We don't know how accurate that figure is. It is the last 2 or 3 weeks' figure. Our estimate will be 303,000 barrels a day. It may be too low. They may develop more pools and get more production. We can't keep up with a situation like that.

Mr. O'CONNELL. You may not have the figures in mind, but take a month like the month of September. I take it you made an estimate for September and I take it you probably know how close that estimate was to being correct.

Dr. WHITE. Not yet. We know what the August figures were.

Mr. O'CONNELL. How close were you in August?

Dr. WHITE. I should judge we have been running twenty-five to thirty thousand barrels a day below what they have been doing each month. When they get up to 285,000 barrels we probably are 30,000 barrels below; in other words, at a figure where they were about 6 weeks before that time. We have no basis of knowing when a meteoric production of that kind is going to stop.

Mr. O'CONNELL. You indicated that if proration were effective in Illinois, you would be more accurate.

Dr. WHITE. Actually, I don't think anybody thinks that production is sound, but that isn't our business. We are projecting competitive trends as they exist. We aren't exercising judgment on whether Illinois should produce that much oil. We are estimating what the demand is.

Mr. O'CONNELL. Also where you have a situation such as you have in Illinois without proration you aren't able to forecast with any degree of accuracy.

Dr. WHITE. We aren't able to forecast in any State that is increasing its production by tenfold in 8 or 10 months. You don't know how fast it is going to go up.

Mr. O'CONNELL. In other words, you are unable to forecast with any degree of accuracy in the States where they don't have effective proration laws.

Dr. WHITE. No; that wouldn't be true at all. It is just where you have a sudden rise in demand. If it is new production, nobody knows how much new production is going to be brought in or how much of that new production will be marketed. In other words, we have no basis, there is no stability in the curve. After a situation once reaches a peak, changes take place and are gradual on a more or less established line. When a meteor comes up out of the sea that you didn't expect, nobody can tell just where it is going to go or how far up or down.

Mr. O'CONNELL. I take it in a State where you have effective proration you would have no meteors.

Dr. WHITE. No. Well, of course, national demand doesn't move in the same proportion that Illinois demand does. National demand rose only about 6 percent last year, but when a State doubles and triples, and even more than that, its production in 4 or 5 months' time that is a situation that no forecaster can anticipate except as he moves up as fast as he sees any evidence before him.

Mr. BERQUIST. Would you say, then, Mr. White, the Bureau of Mines estimates do contribute to the stability in the production of crude?

Dr. WHITE. Well, that depends on what the people do who use them.

Mr. BERQUIST. Do you think it does?

Dr. WHITE. I should think it probably does; yes.

Mr. BERQUIST. Do you think also the Bureau of Mines' estimates also contribute to the price of crude?

Dr. WHITE. Accepting your question, they would, but I am not quite accepting your question, because it depends on the action of somebody who takes information. I wouldn't lay it to the Bureau of Mines estimates one way or the other. I would say it depends upon the State conservation laws. The people who administer those laws,

some of them, make some use of our forest estimates. To the extent they do, and the forecasts are a fairly accurate measure of the competitive demand for oil by States, they are adjusting their production more nearly to probable market demand than they would otherwise be doing. How far that would produce the results you suggest I wouldn't want to state one way or the other.

The CHAIRMAN. Any other questions?

Mr. AVILDSSEN. I have one question I would like to ask Mr. Berquist as a lawyer.

The CHAIRMAN. Are you asking for a legal opinion? Can I swear him?

Mr. AVILDSSEN. I am asking with regard to this estimate made by this Bureau, whether they have special legal powers which enable them to get this information and make these estimates. In other words, could all this be done by a private agency, by the American Petroleum Institute or Brookings Institution or not?

Mr. BERQUIST. First, thank you for the compliment. I would have to refer it to Mr. Snyder, who is the lawyer.

Mr. SNYDER. Let us ask Mr. White whether there is any industry organization that does make a similar estimate.

Dr. WHITE. I don't know of any other organization that does work of this character. I think if there are other trade organizations that do, they probably do it for their own members, rather than for publicity purposes.

Mr. SNYDER. How close does the American Petroleum Institute come to doing the same work that you do?

Dr. WHITE. They collect certain data from members that cooperate with them. They don't collect any monthly data that I know of. The only data they are collecting are some of this weekly data which we have never collected and which they started collecting, but when it comes to monthly data, I don't think there is any conflict, and they could not get the coverage we get, which is 99 percent plus on a voluntary basis. They couldn't get 99 percent coverage.

Mr. SNYDER. With regard to storage data, every month you have to use their weekly data in order to arrive at your estimated storage figure, do you not?

Dr. WHITE. We don't use their weekly data in our monthly figures at all, or even our own weekly data.

Mr. SNYDER. Do not the forecasts of storage stocks refer to the American Petroleum Institute data?

Dr. WHITE. Wait a minute. You mean in a preliminary estimate of the last 4 or 5 weeks' operations? We finally get a final figure. We make an estimate as preliminary evidence. We usually don't take the A. P. I. figures direct, anyway. We know their production figures run a little low. We approximate the current data to the best of our ability.

Mr. AVILDSSEN. Has all this got to do with my question as to the legality of the thing and the special laws?

Mr. SNYDER. As to the legality of any activities of a Government department I do not care to express any opinion whatever.

The CHAIRMAN. The testimony of Mr. White was that there was no specific statute authorizing this particular work, but that the Bureau conceives it to be within its authority under the general statute setting up the Bureau of Mines, and that it has received congressional approval

in that appropriations have been made from year to year sufficient to maintain the overhead of the Bureau in maintaining its staff to do this work. I take it there is no specific statute authorizing the formulation from month to month of an estimation of demands.

Dr. WHITE. That is in those specific terms. The organic act of the Bureau permits the carrying out of the economic investigations and the collection and publication of factual data.

Mr. AVILDSSEN. Then, Mr. Chairman, would you give us your opinion as a lawyer whether a private agency or association of oil companies could perform the same service legally?

The CHAIRMAN. That doesn't require the opinion of a lawyer at all. As a matter of fact, of course, any private agency that wanted to undertake that work could, undoubtedly, make its estimate.

Mr. AVILDSSEN. Do exactly the same thing; collect the same information? They don't compel people to report. It is a voluntary report.

The CHAIRMAN. I know of no reason why any private institution that wanted to go to the trouble and expense of making estimates should not do it or could not do it legally. Of course, the question might eventually rise whether estimates of that kind were being prepared for a purpose of controlling prices, and then a different issue would arise, but on the manner in which you stated the question I think my observation is correct.

Mr. BERQUIST. One other question. Mr. Thompson¹ indicated he used the Bureau of Mines estimates for purposes of making allowables. To the extent, then, that the State railroad commission of Texas would use those and other commissions would use those estimates, the estimates that would have an effect to stabilize or affect production and in turn would have a further effect to stabilize or affect prices of crude oil. Would that be true, insofar as the use of them is concerned?

Dr. WHITE. If they consistently used our estimates it might, but I think if you take the figures of State allowables for Texas and our estimates you will find at times very considerable divergences. In other words, the State of Texas uses those forecasts exactly as they are meant to be used, as the best estimate we have. If for some reason they want to set up a higher or lower allowable, they proceed to do it, and in recent months Texas evidently has desired to reduce the stocks of Texas oil and has gone considerably below our allowables and has accomplished that purpose.

The CHAIRMAN. Are there any other questions? If there are no other questions, the committee will stand in recess until 2:30.

Thank you very much, Dr. White.

(The witness, Dr. White, was excused.)

TESTIMONY OF RALPH J. WATKINS, ECONOMIC ADVISER, NATIONAL RESOURCES PLANNING BOARD—Resumed

Mr. WATKINS. Mr. Chairman, with your permission, may I sum up the import, as I see it, of the testimony presented to the committee yesterday afternoon and this morning? This can be done in a few brief statements, as follows:

The grave waste of capital and of irreplaceable resources that obtains in this industry inheres in the economic organization of the

¹Ernest O. Thompson, member, Texas Railroad Commission, whose testimony appears in Hearings, Part 15, p. 8206, et seq.

industry, including multiplicity of ownership and operating units and the legal framework—that is, the rule of capture—within which the industry must operate. Consequently, responsibility for this waste must be assessed against us all collectively; that is, against Government, including the courts, since Government must determine this framework.

The central aim of public policy toward conservation of petroleum should be to maintain an adequate supply at a reasonable price as long as possible.

To pursue that aim it is essential that public authority be invoked to assure that oil and natural gas be produced by such methods as will avoid waste of these unique resources.

The technical device for assuring avoidance of waste of these resources is scientific unit control of geological structures. The application of such scientific unit control depends on the complete displacement of the rule of capture by a thoroughgoing law of ownership in place which would allot to each claimant his equitable proportion of the oil and gas in the common reservoir which underlies the land he owns or controls.

The National Resources Committee in its energy resources study recommended that progress toward the goal of conservation could be made through the development of national minimum engineering standards for the production of oil and gas, such standards to be worked out in cooperation with the oil-producing States and the industry.

The inherent logic of this problem is one which calls for the exercise of Federal authority, tempered with recognition of the mutual interests of the States and the Federal Government through cooperation in the development and enforcement of minimum standards. Only the Federal Government has jurisdiction commensurate with the scope of this problem, and surely at this stage it does not need to be argued that the elimination of grave avoidable wastes of such an essential resource is a proper field of Federal interest.

Finally, Mr. Chairman, I should like, on behalf of my associates and myself, to express to the committee our deep appreciation of the courteous hearing you have given us.

(The witness, Mr. Watkins, was excused.)

(Whereupon, at 1:25 p. m., a recess was taken until 2:30 p. m. of the same day.)

AFTERNOON SESSION

The hearing was resumed at 2:45 o'clock p. m., upon the expiration of the recess.

The CHAIRMAN. The committee will please come to order.

This afternoon the witness will be Mr. Christopher Del Sesto, who, as a member of the staff of this committee has examined and studied a good deal of the material, particularly the questionnaires which have been submitted to the committee. I will ask Commissioner Henderson to make an introductory statement.

STATEMENT OF MR. HENDERSON

MR. HENDERSON. I think it is well to recall, at this time, Mr. Chairman, the nature of the presentation of the oil industry. As you will recall, the oil industry was asked, through its established association,¹ to make a presentation of economic facts of the industry. The industry also undertook freely to supply the committee's staff with considerable information relating to its financial and operating structures.

An extensive questionnaire was prepared on behalf of the committee staff and submitted to the industry, and may I say that with few exceptions there was a complete response from the constituent companies of the association. The question then arose as to what type of analysis should be made of this financial information relating to one of the four largest American industries. It was felt that rather than make a usual statistical presentation, this industry ought to be examined in terms of its financial statements in relation to the terms of our basic charter, which consists as you know of the resolution creating the committee and also the President's message which gave rise to it.²

As a member of the committee staff Mr. Christopher Del Sesto was asked to make a critical analysis of the financial facts of this industry and to make a presentation to the committee. Mr. Del Sesto is truly well qualified to make this presentation, being both a certified public accountant and a member of the bar, having graduated from Boston University and Georgetown Law School. He was formerly a member of the Chief Accountant's staff of the Securities and Exchange Commission and also formerly State budget director and comptroller of the State of Rhode Island. In this connection he had charge of the preparation of the State budget under the direction of the Governor and also was in charge of the approval of State expenditures.

As part of this work he headed the bureau of audits of the State, which audited all State departments, municipalities of the State, and assisted the bank commissioner, insurance commissioner, and public utilities commissioner in the audit of banks, insurance companies, and public utilities. He was formerly chief accountant in the State treasurer's office of Rhode Island, and had about 7 years of public practice in addition to his teaching experience at Boston University and Northeastern University. With this qualification I would like to turn the witness over to Mr. Cox for the presentation.

THE CHAIRMAN. It might be added, I think, that although Mr. Del Sesto speaks as a member of the staff which has been working on the material presented to the committee, his testimony cannot be regarded as an expression of the committee. It is merely the presentation to the committee of his conclusions drawn from the material at hand.

Mr. Del Sesto, will you come forward, please? Do you solemnly swear the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

¹ American Petroleum Institute.

² See Hearings, Part 1, "Exhibits Nos. 1 and 2," appendix, pp. 185 and 192.

**TESTIMONY OF CHRISTOPHER DEL SESTO, SPECIAL ASSISTANT
TO THE ATTORNEY GENERAL, DEPARTMENT OF JUSTICE,
WASHINGTON, D. C.**

Mr. DEL SESTO. I do.

The CHAIRMAN. You may be seated.

Mr. DEL SESTO. Mr. Chairman and members of the committee, I have been assigned, as has already been stated, to make a review of the financial reports and data that have been submitted by the oil companies in response to this committee's questionnaire. I was also assigned to the task of reviewing the replies submitted by the oil companies in response to a supplementary questionnaire which dealt with the cost of gasoline at the refinery gate and with the classification of income by branches and departments of business.

In connection with the first part of the work I present for the record a statement which I have designated as statement "A," and that statement is accompanied by two appendices, which I also offer for the record.

The CHAIRMAN. They may be received.

(The statement and appendices referred to were marked "Exhibits Nos. 1312, 1313 and 1314" and are printed separately as part of Hearings, Part 17-A.)

Mr. DEL SESTO. In connection with the second part of the work I have prepared a statement which I have designated as statement "B," which I also offer for the record.

Senator KING. I show you these two. Are either of these "A" or "B"?

Mr. DEL SESTO. Statement "A" is designated; I don't think statement "B" is.

Statement "B" is also accompanied by two appendices, which I also offer for the record at this time.

The CHAIRMAN. They may be admitted.

(The statement and appendices referred to were marked "Exhibits Nos. 1315, 1316 and 1317" and are printed separately as part of Hearings, Part 17-A.)

Senator KING. Those appendixes are part of the statement?

Mr. DEL SESTO. Yes; but they are not mimeographed, Senator.

In presenting both of these statements to the committee, I have attempted as far as possible to make a factual presentation based on the questionnaire, and I have also attempted to raise certain questions and issues, which I believe should merit the consideration of this committee. I have tried as far as possible to avoid the expression of any opinions of my own in the two statements, but at the outset I would like to say that to the extent that I have expressed any opinions, or to the extent that I do express any opinions today, they represent my own views and do not represent views of either the Department of Justice, of which I am a member, or of this committee.

Some of the material which we have prepared for the committee pursuant to our review of the financial data has already been presented. That was part of "Exhibit No. 1138,"¹ which was the outline of economic data, which was presented on the opening day. I don't

¹ Printed separately, with "Exhibit No. 1139," as Hearings, Part 14-A.

want to go over all of that material today, but I think that some of the more salient points which were included in that summary should be pointed out at this time.

First of all we should recognize that the petroleum industry, measured by the amount of capital involved, is one of the four largest industries of this country. It utilizes from 11 to 15 million dollars of capital. The industry has had a steady growth, measured in terms of gross investment and capital assets. It has grown from 6½ billion dollars in 1921 to 14¾ billion dollars in 1938. Those figures are for the industry itself as prepared by the American Petroleum Institute.

The industry is also divided roughly into four branches, as has been testified in this hearing: Production, transportation, refining, and marketing. From the best available figures that have been presented we find that the production branch represents approximately 45 percent of the total investment; the transportation branch represents about 15 percent of the total investment; refining and manufacturing, 25 percent; and marketing, 15 percent.

INVESTMENT AND EARNINGS OF THE INDUSTRY

Mr. DEL SESTO. In comparing the earnings of the petroleum industry with the earnings of other industries we find two things. First of all, the earnings on the whole have been less than the earnings of other industries. The average for a 15-year period, 1922 to 1937, for 135 of the leading companies has only been 4 percent, whereas the average for all industries during that same period has been approximately 5 percent.

The CHAIRMAN. In determining these percentages among the various branches of the industry what were the sources from which you determined the various percentages?

Mr. DEL SESTO. There were three sources, primarily, Senator. First was a survey made by the National Petroleum News; secondly were some figures presented by Standard Statistics in a review of the petroleum industry; and third were our own figures as we got them from the replies to the questionnaire.¹

I might say that the figures are, of necessity, quite rough, because while we can measure the larger enterprises in the industry, it is always difficult as you get into the smaller units, but I think that from the available data those figures give an indication of how the investment is spread in the four branches of the industry.

The CHAIRMAN. It doesn't purport to be absolutely accurate. It is an approximation.

Mr. DEL SESTO. I think any figures with respect to an industry as a whole would have to be of that type.

The CHAIRMAN. Would it be proper to draw the conclusion that this would represent rather the division in the larger units than in the industry as a whole?

Mr. DEL SESTO. Well, the larger units comprise such a large part of the industry that their figures necessarily will set the pattern, and smaller units would hardly affect the totals as obtained.

I said there were two points about the earnings which were significant. The second point about the earnings is that they fluctuate in

¹ The questionnaire, admitted to the record as "Exhibit No. 1137," appears in Hearings, Part 14, appendix p. 7426.

the oil industry to a greater degree than they fluctuate in industry in general, and in our presentation of the opening day we had a chart, Table E,¹ which compared the income of 82 oil-producing companies, producing and refining companies, with 735 industrials and 960 corporations of all types.

This chart is already in the record. I simply call your attention to it at this time. You will notice, taking the high and the low points, that the low point in the oil industry, as far as earnings was concerned, was reached in 1931, and it is generally believed in the industry that the cause of that was the overproduction of petroleum in the East Texas field.

Another significant thing about the chart is that in 1937 the oil industry had recovered the losses sustained during the depression, and that in 1937 the earnings were at a higher level than they were in 1929, as far as the oil industry was concerned, whereas industry in general, as measured by the 735 industrial companies, was only 80 percent, approximately, of 1929, while the 960 corporations of all types were at a little less than 70 percent.

You will also notice in the chart that beginning with 1933 there was a steady increase in the earnings of oil companies, and no doubt two factors assisted in that. One would be the proration program and the other would be the code as a result of the N. R. A., but that is merely a conjecture. I just offer that as a suggestion to the committee.

The CHAIRMAN. Well, to what do you ascribe the fact that, as shown on this chart, the upward trend of the oil industry continued after 1935, while the trend of 960 corporations and the trend of 735 industrial corporations tended to flatten out during that year?

Mr. DEL SESTO. I don't know what caused that greater increase.

The CHAIRMAN. Well, the trend upward from 1933 to 1936 was practically the same.

Mr. DEL SESTO. That is right.

The CHAIRMAN. With respect to all three factors that went in the preparation of this chart.

Mr. DEL SESTO. That is right.

The CHAIRMAN. What was the source of the statistics which led to the drawing of this draft, 960 corporations and the 735 industries?

Mr. DEL SESTO. Standard Statistics. All of the information included in that chart was obtained from Standard Statistics.

Mr. HENDERSON. If I may be allowed a suggestion, I believe that one reason for the continuation of the earnings in the oil industry was what might be termed the stability in the price structure that continued after the N. R. A. The first real disturbance in the price structure of crude was long after the N. R. A.

Senator KING. In the figures or in your presentation have you included the small distributors of crude and of gasoline, gasoline stations and so on?

Mr. DEL SESTO. In the 28 companies, no. Those 28 companies represent the larger companies in the industry, generally integrated companies, and mostly companies which have securities outstanding in the hands of the public. That is why Standard Statistics would compile those figures.

¹ Hearings, Part 14-A, p. 7706.

Senator KING. Well, the net income of the 28 oil-producing and refining companies in part was received, was it not, from its gasoline stations or its retail disposition of some of its products?

Mr. DEL SESTO. Yes; that represents the income from all sources.

Mr. AVILDSSEN. Mr. Henderson, how would you explain the drop in 1938, which seems to be at about the same rate as the other companies? The N. R. A., you say, accounted for a differential in 1937. What happened in 1938?

Mr. HENDERSON. No; I said the stability in the price structure in the oil industry was not disturbed immediately after the "hot oil" decision, and the first real disturbance did not come until later.

Mr. AVILDSSEN. But there was a disturbance in 1938?

Mr. HENDERSON. Yes.

Senator KING. That disturbance may have resulted from increased production?

Mr. HENDERSON. That is one of the things, Senator, we have been trying to piece out from these hearings.

The CHAIRMAN. What is the basis upon which 28 oil companies producing and refining are to be compared with 735 industrial corporations? Why 28 in one instance and 735 in the other? What is common to both lines?

Mr. DEL SESTO. The unit compared is net income after all charges in both cases, and these are figures put out annually by Standard Statistics, and they apparently feel that 735 is a big enough coverage of industrial companies so as to give the trend for industrial companies.

The CHAIRMAN. Then the selection of the 735 companies was not made by you.

Mr. DEL SESTO. Oh, no. None of these—the selection of 28, 960, and 735, was made by Standard Statistics.

The CHAIRMAN. So you are merely transmitting to us the chart prepared on Standard Statistics figures, and Standard Statistics selections, and not on your selections.

Mr. DEL SESTO. That is right. I intend to do this, and then later give you our figures based on 20 companies that we investigated.

Mr. AVILDSSEN. Is this chart made by Standard Statistics?

Mr. DEL SESTO. No; we used the figures.

Mr. AVILDSSEN. Did they tell you what the names of the 735 companies were?

Mr. DEL SESTO. No; they don't publish the names.

As we pointed out in our opening statement, the petroleum industry is characterized by a relatively small number of large enterprises, constituting probably two-thirds of the investment in the entire industry. The remainder of the industry is made up of thousands of small producers and marketers, and several hundred refining companies. These larger units in the petroleum industry are generally referred to as major companies, and in this presentation on page 2 I have listed the 20 major companies.¹ Those companies are listed in the order of their size as measured by their total assets as of December 31, 1938. I just want to call your attention to one company, No. 7, Cities Service Co. In making the comparison, we did not use the total assets of Cities Service Co. because it is engaged not only in the

¹ Hearings, Part 14-A, p. 7708.

petroleum industry but also in public utilities, so for the purpose of this comparison we have used the three principal subsidiaries of Cities Service which are engaged in the petroleum industry.

The total assets of these 20 companies as of December 31, 1938, amounted to \$8,000,000,000, and analyzing the total assets of the companies over a 15-year period, starting with 1924, we find that it has been an increase from \$5,000,000,000 to \$8,000,000,000. I have a chart that will show that.

You will notice that this chart is already in the record. It is Chart XXII of "Exhibit No. 1138."¹

You will note that measured by total assets, these 20 major oil companies have increased from 5 billion to 8 billion.

The CHAIRMAN. These same 20?

Mr. DEL SESTO. The same 20 companies. You notice the only apparent drop was in 1932, and in the so-called depression years.

There were two factors for this drop as I see it. The first factor, of course, is the well-known factor that business in general reached its low point in 1932. I think, however, from our examination of the financial data that there was an artificial element which caused the drop in 1932 and in subsequent years, and that is a matter which I will discuss a little later in connection with the restatement of capital stock and the revaluation of assets.

We found that subsequent to 1929, and particularly starting with 1932, many industrial companies, including a large number of the oil companies, engaged in the practice of revaluing their assets and writing them down, and as a result, the figures after 1932 are on an adjusted basis as adjusted by the companies themselves. If it had not been for those adjustments, the drop probably would not have been so severe.

Senator KING. Were those revaluations pursuant to one of the revenue acts under the terms of which corporations for the purpose of paying their taxes might revalue?

Mr. DEL SESTO. I don't think it had anything to do with taxes, Senator. I think they simply found they were on too high a level and they wanted to bring down the level at which their assets were stated on the books. I go into that matter in some detail a little later.

As a companion chart to this, I want to draw your attention to this chart entitled "Capital Employed of 20 Major Oil Companies," which is Chart XXIV of "Exhibit No. 1138."² This is the same chart as the previous one in that it measures the increase of assets from 5 billion to 8 billion but it has an additional factor in that it shows the nature of the capital employed by these companies.

In using the term "capital employed" I use it in its broadest sense. In other words, I include not only the common stock and surplus but also reserves, preferred stock and funded debt, minority interests in subsidiaries, and I include other liabilities. You will find in some statistical analyses they include in "capital employed" only the first two or three.

The CHAIRMAN. Why do you say minority interests in subsidiaries?

Mr. DEL SESTO. We are dealing in all of these cases, with one exception, with the top holding company and some of these subsidiaries

¹ Hearings, Part 14-A, p. 7739.

² Ibid., p. 7742.

owned by these holding companies are not 100-percent owned, and this band, "minority interests," represents the investment that outsiders have in the subsidiaries of these top holding companies.

The CHAIRMAN. So it is not meant to reflect the capital investment of the controlling interest. That is reflected in some other portion of the chart.

Mr. DEL SESTO. The controlling interest would be the common stock and surplus.

In connection with this chart, there is something significant so far as the oil industry is concerned as measured by the 20 major companies. You will notice that a great part of the capital has been raised from common-stock holders as indicated by common stock and surplus, and that the industry has relatively a small amount of preferred stock and funded debt.

The CHAIRMAN. You say the capital has been raised from the common-stock holders as represented by that proportion of the chart which shows common stock and which shows surplus?

Mr. DEL SESTO. That is right.

The CHAIRMAN. Well, now, is there not some part of that common stock which represents stock dividend?

Mr. DEL SESTO. Yes; there were several companies which issued stock dividends, but it would have hardly any effect in this chart, because when a stock dividend is declared it is merely a transfer from the surplus account to the common-stock account, so it would have a tendency to change this lower band, but it would not change the total.

The CHAIRMAN. Do you attach any significance to differentiation between the investment which goes into the industry by actual contribution from those who purchase common stock and the capital which goes into an industry by being plowed back from earnings in the form of stock dividends?

Mr. DEL SESTO. Yes; I was going to get to that in a minute. I was going to mention this surplus account. Incidentally I might mention, while I am on this, that one company—for example, the Sun Oil Co.—makes it a consistent practice to declare stock dividends, and that company has shown quite an increase; and I think, of the years we examined, in all but 2 years that company issued stock dividends.

Another company which issued substantial stock dividends was the Gulf Oil Co.

With respect to surplus, I think I pointed out that 70 percent of this total capital represented the investment of common-stock holders. I want to call your attention to the surplus. A layman generally thinks of surplus as accumulated earnings, and as you look at this chart you might think that the industry has grown to some extent by the reinvestment of its earnings, because the surplus has increased during that period from \$1,110,000,000 to \$2,214,000,000, or an increase of \$1,104,000,000. The largest increase was in surplus as measured by numbers of dollars, but I want to point out that that surplus does not represent all earnings; that part of the surplus consists of capital contributed by stockholders, which under the laws of many States can be put into a surplus account, and that part of the surplus also represents surplus arising from restatement of capital stock, a matter which I shall go into more in detail later on, but I thought I would call your attention to it at this time.

The CHAIRMAN. Do you know what the proportion is of these two items?

Mr. DEL SESTO. No; I haven't made the totals of those items, but I do point out the companies that have done that later on in the presentation.

The CHAIRMAN. Its significance would depend to some extent upon the size of these items, would it not?

Mr. DEL SESTO. That is right. My offhand opinion is that the amounts are substantial.

Now another point I would like to bring out is that while there has been an increase from 5 billion to 8 billion dollars, a considerable part of that increase has been accounted for by mergers and consolidations. During this period a number of these companies bought out other companies, so that it would not be accurate to say that the entire increase of 60 percent between 1924 and 1938 was entirely due to reinvestment of earnings, or anything like that, but a considerable part of it was accounted for by mergers and consolidations. It was unfortunate in one respect that the questionnaires of the committee did not have a specific question on consolidations and mergers so that we could have brought out how much of this increase was due to consolidations and mergers.

We have been talking about 20 companies and we have been giving the total amount invested by the 20 companies, but you will realize that all of these 20 companies are not equal in size, and in our opening statement we had included chart 23 which compared the 20 major oil companies with one another at 1934 and at 1938.

I want to call your attention to one fact, that if we take the first 5 leading companies at December 31, 1938, these 5 leading companies account for 60 percent of the total assets of the 20 major oil companies; so that not only is there concentration within the industry as measured by the assets of the 20 major oil companies, but even among themselves there is considerable concentration, and 60 percent of the total assets is represented in the 5 leading companies.

You will notice, for example, the relative position of the Sun Oil Co., which is considered a major company, and you had its president here as a witness. Compare that company, for example, with Standard Oil of New Jersey or Socony-Vacuum Oil Co., and you will see a considerable difference.

Passing on to the size of these companies, I would like to discuss the earnings of these 20 oil companies.

The CHAIRMAN. This chart, not the one you are putting up now but the one you just distributed to us ("Comparison of the total assets of 20 major oil companies"),¹ shows that there has been some change in the relative standing of these companies among themselves.

Mr. DEL SESTO. That is right.

The CHAIRMAN. Particularly the lower 15.

Mr. DEL SESTO. I might offer for the record at this time a chart which was prepared showing shifts in the relative position between 1929 and 1938.

The CHAIRMAN. How does that compare with the chart which as I recall was presented by Mr. Gill or one of the other witnesses?²

¹ "Exhibit No. 1318," appendix, p. 9863.

² Referring to "Exhibit No. 1204," introduced by Dr. Robert E. Wilson, president, Pan American Petroleum and Transport Co.; included in Hearings, Part 15, appendix, p. 8865.

Mr. DEL SESTO. I am not familiar with that.

The CHAIRMAN. You didn't see that chart.

Do you offer this now for the record?

Mr. DEL SESTO. In view of your question, I think it might be helpful.

The CHAIRMAN. Very well, it may be received.

(The chart referred to was marked "Exhibit No. 1318" and is included in the appendix on p. 9863.)

Mr. DEL SESTO. During the period 1924 to 1938 the major oil companies averaged 5.6 percent on their common stock in the matter of earnings [referring to "Exhibit No. 1318"] and of the earnings earned, approximately 70 percent were declared as dividends and 30 percent was plowed back into the business. I think that was the point you raised a few minutes ago. Of their published earnings, 70 percent was paid out in dividends and 30 percent was plowed back.

Mr. HENDERSON. That is a larger percentage paid out in dividends than is usual with American industry.

Mr. DEL SESTO. Yes; in that respect, measured by the proportion of earnings distributed, the oil industry has done much better than industry in general.

Mr. AVILDSSEN. Mr. Del Sesto, did you figure out how much the oil companies made on the total invested capital, I mean the common stock, the surplus, the preferred stock, and so forth?

Mr. DEL SESTO. No, sir. I used two bases.

Mr. AVILDSSEN. Of the total capital employed, I mean. This figure might be a little misleading.

Mr. DEL SESTO. It would not be misleading because we used net earnings after deducting interest and preferred stock dividends which would be the residue that would go to the common stockholders.

Mr. AVILDSSEN. But you have to include preferred stockholders as well as common. Some are the same. Some will have both preferred and common.

Mr. DEL SESTO. We were measuring in terms of the equity of the common stockholder. I agree with you that there are many bases that might be used, invested capital or total assets, but where you use invested capital you don't eliminate interest and preferred dividends and we did eliminate those two items, so when I talk about earnings I mean the earnings which are applicable to the common stockholders.

The dividends that were paid out to the common stockholders averaged 4 percent during this period.

Senator KING. Did you discover that in some years many of the companies, or some of them, paid no dividends at all because of losses?

Mr. DEL SESTO. Yes.

Senator KING. So they have lean years as well as years in which they paid a dividend.

Mr. DEL SESTO. That is right. We have introduced into the record already tables of the companies, and there is considerable variation among the companies themselves.

Mr. AVILDSSEN. Mr. Del Sesto, referring to this chart¹ which shows 1929 and 1938 figures, some of the companies apparently have not

¹ "Exhibit No. 1318."

changed in size of total assets, others have increased 50 percent, some have increased 200 percent, and so forth. Have you made any attempt to find out why some grew so much faster than others? You don't know how much of this is due to consolidations?

Mr. DEL SESTO. No; in that respect I say it is unfortunate that the committee's questionnaire did not have a question on mergers and consolidations. I think that would have been interesting.

Mr. AVILDSSEN. But you have no theory or explanation at all as to why some companies grew so much faster than others and why some stood still?

Mr. DEL SESTO. No.

As important as these figures may be, I believe, however, that this committee is interested in the broad issues which have been suggested by the data presented by the oil companies. As I understand it, this committee is not interested primarily in the oil industry, but it is interested in the broader problem of the concentration of economic wealth and power in this country. As I see it, this committee has two functions, first to determine whether or not there is concentration of wealth and power in any industry, and then secondly, if there is, to determine whether or not that concentration has been used in the public interest and for the public benefit.

I think in the case of the oil industry, it has been amply demonstrated so far that there is concentration of economic wealth and power in the hands of a few interests. We have seen that these 20 integrated companies control about two-thirds of the total investment. One of the companies, for example, controls about \$2,000,000,000 of capital.

Many of the financial operations of these companies are more extensive in scope than many of our States and many of our large municipalities, so that the next inquiry is whether or not this wealth and power that has been concentrated in the hands of these companies has been used in the public interest.

At the very start we met with two obstacles in determining whether or not these companies have been efficient. When I say efficient I mean in terms of earnings. There are two reasons for that: First of all, liberal State corporation laws, and, secondly, flexible accounting policies and practices. State corporation laws now in force and current accounting practices and policies make it comparatively simple for the management of a corporation to show earnings and to pay dividends notwithstanding the fact that from an economic point of view the corporation has been unsuccessful.

Senator KING. You mean undermining the capital structure.

Mr. DEL SESTO. Yes, sir; I mean just that.

The CHAIRMAN. May I interrupt you to make a comment which is interesting to me at least. Of the 20 corporations which you have listed in your statement, I find that they have been incorporated in various States upon this basis: Indiana, one—

Mr. DEL SESTO (interposing). Excuse me, Senator, if you will turn to page 1, you will find I have tabulated them for you, page 1 at the bottom.¹

The CHAIRMAN. Oh, yes; nine companies in Delaware, three in Ohio, two in New Jersey, two in New York, two in Pennsylvania, one in California, and one in Indiana.

¹ Part 17-A, p. 9962.

Mr. HENDERSON. Of those nine companies in Delaware, do any of them have their operating headquarters in that State?

Mr. DEL SESTO. I doubt it. The Texas Corporation, for example, I understand has its headquarters in New York. The Standard Oil of California, of course, is in California. The Cities Service Co. is in New York.

The CHAIRMAN. Now, Mr. Del Sesto, as I count these from page 2, there are 10 Delaware corporations. Have I miscalculated that, or have you?

Mr. DEL SESTO. I can tell you where the discrepancy might be. In Cities Service Co., you probably counted one of the subsidiaries.

The CHAIRMAN. That is right, I did.

Mr. DEL SESTO. In my tabulation I counted only the top holding company.

The CHAIRMAN. I counted the Empire Gas & Fuel Co. as a Delaware corporation.

Mr. DEL SESTO. That is a subsidiary company.

The CHAIRMAN. So the Cities Service Oil Co. is also a subsidiary, and that was incorporated in Pennsylvania.

Mr. DEL SESTO. That is right.

The CHAIRMAN. Very well, I see.

Mr. DEL SESTO. Getting back to your question, Mr. Henderson, I doubt if any one of the nine companies has principal offices in Delaware.

Under present State corporation laws dividends may be paid out of the capital contributed by stockholders rather than from earnings. Only a very few States require that dividends may be paid only from surplus arising from earnings. Thus, a steady dividend record of a corporation is not at all conclusive that the management has been successful.

Under present-day accounting practices, management can bury certain current operating charges and operating expenses in the surplus account instead of charging the current income account; management can write up and write down assets at will; management can reduce or entirely eliminate certain depreciation and depletion charges. It follows, therefore, that a current profit of some kind can be reported, even though there is actually a shrinkage in the investment of stockholders.

In view of the present corporation laws and current accounting practices, there can be no accurate determination of whether the management of a corporation was justified in buying or building plants, or in the acquisition of other companies. The stockholders of a corporation cannot properly appraise the management's action, nor can the public at large determine whether the expansion of large corporations by mergers and consolidations is justified and in the public interest.

Liberal corporation laws and flexible accounting policies, of course, do not obtain only in the petroleum industry, but I thought that this was a matter that should be brought to your attention because you will probably find some of the practices which I mention prevalent in other large industries, and I am suggesting that before this committee finishes its work, not only in the oil industry but in other industries, at some time it should make a detailed study of the limitations of the State corporation laws now in force and the weaknesses of current accounting practices and policies.

The CHAIRMAN. The allocation of capital stock, capital invested in common stock, to surplus is permitted by the Delaware State corporation laws.

Mr. DEL SESTO. Oh, yes. I was going to get to that, and incidentally, Senator, just before I came to the hearing today I was in the library and picked up a pamphlet entitled "Delaware Corporations," put out by the Corporation Trust Co., advising corporations to go to Delaware. I see this thing as one of the inducements: "Payment of dividends may be paid out of net assets in excess of capital as well as out of net profits, a useful power in certain kinds of business," so that is offered as an inducement for management to go to Delaware, for that purpose.

The CHAIRMAN. Well, to the extent that Delaware corporations are engaged in national business the Delaware corporation law in effect sets the standard for national corporation practices.

Mr. DEL SESTO. That is right. I think somewhere in the statement I make the observation that while we have no Federal incorporation law at the present time, for all practical purposes there is a national incorporation law because corporations can go to Delaware, and since there is competition among the States for corporate business, Delaware and other liberal States set the pattern which other States follow.

Mr. AVILDSSEN. Mr. Del Sesto, in studying these reports of the oil companies, have you seen any evidence of a substantial amount of the capital which has been paid in by stockholders having been paid out as dividends? We admit that it can be done. Have you seen any evidence of it?

Mr. DEL SESTO. Not in just that way; but I might also point out that while this paid-in surplus, so-called can be used for dividends, very few corporations actually do that. What they do instead is a more subtle practice; they take certain expenses, write-offs, and charge them to paid-in surplus. That leaves the so-called earned surplus account free, whereas if those charges had gone to earned surplus the amount available for dividends would have been diminished.

Mr. AVILDSSEN. Have you seen in the case of the oil companies a tendency to charge off a substantial amount of such items?

Mr. DEL SESTO. There has been no great amount of that in there, but I would like to point out later on that a number of the companies have carried to paid-in surplus amounts contributed by stockholders, and that is a potential amount which is available either for the payment of dividends or for these write-offs of which I am speaking.

Mr. HENDERSON. In some of these restatements by the major oil companies they have charged off deficits, have they not?

Mr. DEL SESTO. Yes; I was going to come to that.

Mr. HENDERSON. Do you not propose today to take up by individual companies what changes did occur and what charges were made by each company as a result of this capital statement?

Mr. DEL SESTO. That is true, but as I interpreted Mr. Avildsen's question, he had reference more particularly to surplus contributed by stockholders upon the purchase of stock.

Mr. AVILDSSEN. That is right.

Mr. DEL SESTO. That is why I answered that question that way.

Senator KING. Isn't it a fact, however, that in some corporations as well as in partnerships a condition may arise where by reason of very large profits a larger capital structure is not needed and they would dispose of some of the capital in the form of dividends?

Mr. DEL SESTO. Yes; but in that case—

Senator KING (interposing). Reducing their capital, in other words.

Mr. DEL SESTO. In that case those dividends would not be dividends as we think of them as distribution of earnings. That would be in effect a partial liquidation. I have no objection if a corporation finds it has too much capital in partially liquidating, but I think in the cases to which I have reference there is in practical effect a partial liquidation. The stockholder thinks and the public thinks dividends are a distribution of earnings.

Mr. HENDERSON. Take a case, Mr. Del Sesto, where preferred stock relies upon common stock as a cushion, you might say, as a protection for its contractual obligations. When there is a restatement, a writing down of the capital stock, some part of that protection of the preferred-stock holder disappears, does it not?

Mr. DEL SESTO. That is right. I am going to get into that in just a minute.

As I said, we ought in connection with this oil investigation at least to discuss some of the corporate practices and accounting practices which need inquiry by this committee, and I am going to discuss today three of them, and I do not imply by that that there are not others; there are many others, but I am just going to take up three of them.

The first one is a restatement of capital stock and revaluation of assets. The second is the changing concept of surplus in corporations, and the third is this matter of flexible accounting practices and policies.

In connection with the restatement of capital stock and revaluation of assets, I might point out that in the early days of the distribution of securities of large corporations among the public, investors placed much emphasis in their analysis of the affairs of corporations upon their net worth as reflected in balance sheets. At that time it was not uncommon for management, from time to time, to inflate artificially the net worth of corporations by arbitrarily writing up the book value of assets. This practice, known as "stock watering" has now gradually disappeared. It has been supplanted by a new practice which is more subtle and yet which has more far-reaching effects, the restatement of capital stock and the write-down or revaluation of assets.

Senator KING. Do you regard that as subtle? Congress passed an act under which corporations are made to make a restatement of the capital stock for the purpose of assessment.

Mr. DEL SESTO. You are talking about income taxes.

Senator KING. Yes.

Mr. DEL SESTO. I had reference to reports to stockholders and earnings as reported to stockholders. I think, Senator, that there is sometimes confusion between what is tax practice and what is practice engaged in in preparation of reports to stockholders. What may be proper for tax purposes is not necessarily proper in the preparation of reports to stockholders.

Mr. AVILDSSEN. There is nothing necessarily wrong with writing down assets if they have declined in value. It is sound business to do that, isn't it?

Mr. DEL SESTO. Yes; but when you combine the two, restatement of capital stock and the revaluation of assets, as I point out later, you are, in effect, going through a technical reorganization, and I am suggesting that possibly that procedure should not be in the unlimited discretion of the management alone, that since it has some of the earmarks of a reorganization, possibly the whole procedure should be reviewed either by a court or by some regulatory body. In this country, so far as I know, there is no State which requires management to go before a court or a regulatory body when it engages in that practice. In England, however, under the English Companies Act of 1929, the practice of the reduction of capital stock has to be approved by a court.

Mr. HENDERSON. Mr. Del Sesto, you are somewhat familiar by reason of your association with the S. E. C. with this situation. You take a restatement that occurs under the Chandler Act by which there is a reallocation of the assets in the various classes, and compare that with what you suggest may be a quasi-reorganization; the net effect is that in reality there is no distinction except that one is a result of a bankruptcy proceeding, and the other is a voluntary act, usually initiated by the management group.

Mr. DEL SESTO. That is right.

Mr. HENDERSON. So as far as the net effect is concerned, what you call a quasi-reorganization is a reorganization of the capital structure.

Mr. DEL SESTO. That is right. I might also point out that under the Chandler Act, Congress felt that it wasn't sufficient alone to let a court pass on it, but it also required that the S. E. C. step in in the case of certain large corporations and give its technical advice to the court, whereas here under these technical reorganizations there is no review by anybody.

It is true, as I point out, that these reorganizations, quasi-reorganizations, are accomplished first by notice to stockholders, secondly by vote of stockholders. In my opinion, that is merely a ritualistic procedure, for two reasons: Some of the corporation laws don't give the stockholders enough time in which to make the proper study of the contemplated practice; and, secondly, as shown in one of the appendices which I have introduced in the record, less than 1 percent of the stockholders on the average attended the meetings of these oil companies, so management is practically uncontrolled.

The CHAIRMAN. That is characteristic of industry generally and not of the oil business particularly.

Mr. DEL SESTO. That is true, but I think it is a matter which is so serious, Senator, that we can't emphasize it too many times. Since this committee is studying the concentration of economic wealth, I think it ought to consider that matter in its study.

The CHAIRMAN. Of course, I quite agree that there is a very important subject for consideration, but I didn't want it to appear that you were finding something particularly characteristic of the oil industry. It is a customary practice which exists throughout industry.

Mr. DEL SESTO. That is true.

Mr. AVILDSSEN. Isn't it a fact that in recent years a great number of investment counselor firms have sprung up in New York and other

large cities, that they have employed accountants, economists, and analysts of outstanding experience, outstanding ability, to analyze reorganizations and things of this sort, and isn't it a fact that the management of a company putting through a reorganization does in fact have to submit it to careful examination by competent people in that way?

Mr. DEL SESTO. Well, that may be so, but under the Delaware law, for example, there are only 10 days required for notice to stockholders, and I doubt if any stockholder, no matter how well equipped, could make a proper investigation within 10 days.

Mr. AVILDSSEN. No; but could the management afford to have a critical report issued by one of those firms? Even if it did get technically through by reason of that 10-day limitation, there could be legal action instituted if it was shown that there was anything really terribly wrong about the whole proceeding.

Mr. DEL SESTO. I think, however, that stockholders should have—

Mr. AVILDSSEN (interposing). Stockholders, for instance, could be asked to review the thing and have another vote on it, and so forth.

Mr. DEL SESTO. The stockholder shouldn't be left merely to the advice given by these private agencies. It would seem to me that the stockholder ought to have protection.

Mr. AVILDSSEN. That may be, but as a practical matter it isn't as though it were a lot of little stockholders with one or two shares who couldn't afford to employ counsel. There are large holders, investment trusts, and so forth, who do employ competent men to examine all these things.

Mr. DEL SESTO. That is true.

Mr. AVILDSSEN. It would be difficult for the oil companies to fool those market analysts.

Mr. DEL SESTO. I think after you have gone through one of these quasi reorganizations it is very difficult thereafter to make any statistical study of a company, because you have got an entirely new company and everything that has gone before the quasi reorganization has got to be forgotten.

Mr. AVILDSSEN. Let me ask you this. Do you think that the large oil companies are today or have been in recent years fooling the economists, accountants, lawyers, analysts, employed by the large investment trusts, the large banks, and the large investment-counsel firms in New York?

Mr. DEL SESTO. Well, I don't know, I can't speak for them, but I do know that—

Mr. AVILDSSEN (interposing). Do you think so?

Mr. DEL SESTO. Yes; I do.

Mr. AVILDSSEN. You think they have been fooling all those experts?

Mr. DEL SESTO. It is my personal opinion that is so.

Mr. HENDERSON. I would suggest to Mr. Avildsen that the S. E. C. has just issued a report on the bad advice given by investment counsel.

Senator KING. It is a fact, is it not, that in business conducted by individuals and by partnerships they frequently at the request of banks where they are getting credit are compelled to or at least feel constrained to revalue their capital, their assets, and to adjust their accounts and their books with the revaluation.

Mr. DEL SESTO. That is true.

Senator KING. There is nothing wrong if they find they have more capital than they need in paying themselves, the partnership, or the individual, a larger dividend? There is no impropriety in that, is there?

Mr. DEL SESTO. As I pointed out to one of your previous questions, there is no fault to find with the partial liquidation of any business. I do think there is fault to find when dividends are distributed which are ostensibly distribution of earnings and are in fact return of capital, and when the funds have been raised by public distribution of securities and not the private funds of management, then I think it is a matter of some concern to public authorities.

Mr. AVILDSSEN. You say in the case of the oil companies there is no evidence of that being done in substantial form.

Mr. DEL SESTO. Evidence of what?

Mr. AVILDSSEN. Of the money paid in by stockholders being paid out in the form of dividends.

Mr. DEL SESTO. No; but there is evidence of restatements.

Mr. AVILDSSEN. But I mean this thing just mentioned as a bad thing for people to receive as dividends money paid in for stock. You say that is not done.

Mr. DEL SESTO. You get it in two ways. You get this return of so-called dividends being return of capital, you can get it in two ways; first, when they have one of these restatements, second, when they use paid-in surplus for the payment of dividends. Suppose I go on with this restatement.

Mr. AVILDSSEN. In the case of the major oil companies, have they or have they not made a practice in recent years of paying out the money paid in by stockholders in the form of dividends? I thought before you said they had not. There was no evidence that they had done so substantially.

Mr. DEL SESTO. Let's see if I can straighten you out on that. There are eight oil companies which have restated their capital stock during the period of 1929-38, and to the extent that those oil companies paid any dividends subsequent to the restatement, dividends I think represented distribution of capital and not earnings.

Mr. AVILDSSEN. You mean by capital, paid-in capital.

Mr. DEL SESTO. That is right.

Mr. AVILDSSEN. The whole distribution or part of it?

Mr. DEL SESTO. Part of it.

Mr. AVILDSSEN. What part, substantial or very minor?

Mr. DEL SESTO. I would say substantial part in the case of some companies.

Mr. AVILDSSEN. Substantial part in the case of a substantial number of companies?

Mr. DEL SESTO. Yes; I would make that statement.

Mr. AVILDSSEN. That contradicts your previous statement.

Mr. DEL SESTO. Oh, no; I think we are talking about two different things. Also a group of companies have taken part of the cash received upon the sale of stock, which is an entirely different matter, and put it into a so-called paid-in surplus account. Now, with respect to those companies there is no evidence that they used that paid-in surplus for the payment of dividends and that is what I had in mind when I answered your previous question.

Mr. AVILDSSEN. I still don't understand; what did they do? They didn't use any money paid in by stockholders, in the payment of dividends.

Mr. DEL SESTO. That is right.

Mr. AVILDSSEN. They did not do that?

Mr. DEL SESTO. That is right; that second group of companies, no.

Mr. AVILDSSEN. But a large group did do so? Did a large number of oil companies use money paid in by stockholders for the payment of dividends?

Mr. DEL SESTO. This first group of companies which restated their capital stock did; yes. As to the second group of companies which as I say allocated part of the cash received to paid-in surplus, there is no evidence that they used that paid-in surplus as distribution to their stockholders. Possibly this will clear up as I go along and explain the two practices.

On page 5 of the statement, I have listed eight companies which have restated their capital stock during the period of 1929 through 1938, and in addition to that list there was also the Cities Service Co., Delaware, the parent company of the Empire Gas & Fuel Co., which engaged in the practice.

Now it will be noticed that of these nine companies which have been mentioned, five are incorporated in the State of Delaware. Again I would like to point out that this committee may wish to consider the role played by present State corporation laws in the concentration of wealth and power.

I would like to discuss now the restatements as these companies reported them to the T. N. E. C., and I would like, first of all, to skip to the Consolidated Oil Corporation on page 7 of the statement.

The Consolidated Oil Corporation restated its capital stock on January 31, 1932. It reported to the Temporary National Economic Committee, as follows:

As at January 31, 1932, the accounts of the reporting company gave effect to a restatement of capital which involved the transfer to Capital Surplus of the amount by which the stated equity of its outstanding Common Stock without par value exceeded the nominal value of \$5 per share. Such restatement was approved by the stockholders of the reporting company at a special meeting held on March 1, 1932.

Common Stock stated equity account per Company's books at January 31, 1932 (prior to restatement of capital) represented by

6,107,403 shares of company's common stock	\$251, 315, 390
Restatement at nominal value of \$5 per share	30, 537, 015

Balance credited to Capital Surplus	220, 778, 375
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The purpose of such restatement as January 31, 1932, was that Capital Surplus might be created to enable the directors of the reporting company to apply so much thereof as they might deem advisable to writing down the valuation of certain assets in values more nearly conforming to then existing economic conditions.

Mr. HENDERSON. In that balance credited to capital surplus, which is 88 percent of the previous valuation, there was not a return of the \$220,000,000 to the stockholders.

Mr. DEL SESTO. No.

Mr. HENDERSON. This is not a case such as Senator King had in mind where there was a surplus of working funds which were withdrawn from the business and passed back to the contributors of the capital.

Mr. DEL SESTO. That is right.

Mr. HENDERSON. This was merely a restatement for bookkeeping purposes.

Mr. DEL SESTO. That is true.

The CHAIRMAN. Would it be proper to call this the reverse of the stock-dividend technic?

Mr. DEL SESTO. That is right, Senator. That would explain it. When you have a stock dividend you transfer from surplus to capital.

The CHAIRMAN. In other words, the technic of a stock dividend is that the company has earned additional assets which instead of being paid out in dividends to the stockholders is transferred, as it were, to the stockholders in the form of additional certificates of stock.

Mr. DEL SESTO. That is true.

The CHAIRMAN. Now it is quite conceivable that perfectly proper and justifiable reasons might prompt the reverse of that procedure, so that the stock would be written down, as it were, a restatement of capital stock, in order to meet perfectly proper and justifiable conditions. It might also be used for improper objectives too.

Mr. DEL SESTO. That is right. It has a potential danger.

The CHAIRMAN. So that the analysis of this system is of importance that the public may know what technic can be followed under the Delaware law, for example, to affect the value of the stock of these national corporations.

Mr. DEL SESTO. That's right. I have here a chart which is already in the record, chart 25-B of "Exhibit No. 1138."¹

Mr. HENDERSON. Before you go on, Mr. Del Sesto, may I point out that that total amount of write-down of \$220,000,000 is equivalent to the total valuation of some small industries?

Mr. DEL SESTO. That's right.

This chart, which as I say is part of "Exhibit No. 1138," chart 25-B, I believe, shows graphically what occurred in the case of this company, and I might also say that similar charts are already in the record for all of these companies, but I just use this as an illustration. You will notice that in 1930, at December 31, 1930, the common stock stood at \$252,000,000, approximately. Now, you will notice that this company had both preferred stock and funded debt, and these two classes of, I call them creditors, had every reason to believe that they had a cushion that would protect their equity to the extent of approximately \$252,000,000.

As a result of the write-down and restatement, this cushion has been reduced the following year to approximately \$71,000,000.

Mr. AVILDSSEN. Why isn't the surplus a cushion?

Mr. DEL SESTO. I am going to get to that in just a minute.

Now you will notice also that while there was only a small amount of surplus available in '30, in '31 the corporation management has this tremendous amount of surplus available. Now it is true that this is a cushion so long as it remains in the corporation, but prior to the restatement, by law the cushion was here, at the figure of \$252,000,000. After the restatement the cushion by law is at \$71,000,000, and there is nothing that would prevent the directors from paying this out in dividends.

¹ Hearings, Part 14-A, p. 7744.

Mr. AVILDSSEN. Except that it probably represents mostly plant, oil wells, and so forth. It certainly wasn't cash. They couldn't pay it out.

Mr. DEL SESTO. No; that is true. But the point I am getting at is that now they have all of this amount, or some portion, as they want to pay out, to pay out in dividends, where prior to the restatement they could not pay dividends unless their capital was at least this large in amount.

Mr. AVILDSSEN. Now tell us, in 1929 they had this large amount of common stock outstanding. Do you know how much of that was issued for cash paid in by investors and how much was issued for properties of other companies in mergers and consolidations?

Mr. DEL SESTO. No; I don't.

Mr. AVILDSSEN. It might have been, you admit, issued for refineries which were valued at high prices, and so forth, and which have since declined in value, so they really didn't have that much money in the company at any time?

Mr. DEL SESTO. They may not have had cash, but they had assets which would be the equivalent of cash.

Mr. AVILDSSEN. Not necessarily the equivalent, because maybe they couldn't have sold those refineries at any time for that amount of stock. That doesn't necessarily mean that the refineries were worth that in cash.

Mr. DEL SESTO. The directors thought they were worth that when they issued the stock, or they wouldn't have placed it on the books at that value. We will assume that the directors thought that was the proper value or they wouldn't have issued the stock.

Now, another point that I would like to point out, as I mentioned before, for all practical purposes subsequent to this restatement, this is a new corporation, because the same things have happened as if this corporation had gone through reorganization. Its level has been reduced. It has gone through a wringing process, and the equity of the common-stock holders as represented by the capital stock has been reduced.

Mr. HENDERSON. The equity of the common stock?

Mr. DEL SESTO. Yes, sir.

Mr. HENDERSON. Are you quite sure about that?

Mr. DEL SESTO. At that time there had been no write-down of the assets, but after the write-down the equity would be reduced.

Mr. HENDERSON. That's right, taking the two transactions together.

Mr. DEL SESTO. There were two steps to the process, a restatement of the capital stock and a subsequent revaluation of assets of the company.

Mr. AVILDSSEN. Why would there be a reduction in the equity just because they wrote it down?

Mr. DEL SESTO. That is true.

Mr. AVILDSSEN. Suppose they made a mistake in writing it down. That wouldn't change the true value of it. That is an opinion of somebody as to what it is worth. It didn't take anything away from the stock.

Mr. DEL SESTO. I think the equity has been reduced.

Mr. AVILDSSEN. It wasn't reduced by a mere write-down. It was reduced when the value of the thing went down.

Mr. DEL SESTO. I think you will find that many of these write-downs were far in excess of any possible shrinkage in the value of those assets.

Mr. AVILESEN. Then it hasn't hurt the common-stock holder, because he has whatever is left, regardless of what they call it on their books.

Mr. DEL SESTO. I think it has hurt the common-stock holder because thereafter the depreciation charges and depletion charges have been reduced, because of the write down of these assets, and the management is able to show earnings when in fact, if it had been on the old basis, there would have been no earnings. The management is able to pay dividends where previously it would not have been able to pay dividends, and to that extent management can perpetuate itself in office, by giving this appearance of relative stability in its earnings and dividends; so to that extent I think the common-stock holders have been hurt.

Mr. AVILDSSEN. If there is dishonest and unscrupulous management I admit that, but in the absence of that you can't say the equity of the common-stock holders has been changed one iota by the write-down of the capital stock or the assets, because he owns the equity. It doesn't matter what you call it on the books.

Mr. DEL SESTO. Well, yes; I suppose to that extent——

Mr. AVILDSSEN (interposing). I think, Mr. Del Sesto, we have before us a lot of large corporations whose stock is held by investment trusts, widows, and orphans, and so forth, and you are making some pretty serious statements about these big firms, and I think they should be qualified very carefully.

Mr. DEL SESTO. I am just presenting the facts, I am not drawing any conclusions.

Mr. AVILDSSEN. They are conclusions to a large extent.

Mr. Cox. Will the reporter please read the next to the last statement made by Mr. Avildsen?

(The reporter read the statement requested, ending with the words "widows and orphans.")

Mr. Cox. That's what I thought he said.

The CHAIRMAN. Mr. Del Sesto, the surplus of a corporation is part of the equity of the common-stock holders, isn't it?

Mr. DEL SESTO. That is true.

The CHAIRMAN. So that the equity of the common-stock holder is to be measured by the proportion which the common stock and the surplus bears to the total capital structure.

Mr. DEL SESTO. That is true.

The CHAIRMAN. And in a reorganization of any kind, even of this kind of which you are speaking, is it not true that the equity of the common-stock holder will sometimes increase?

Mr. DEL SESTO. Yes; to the extent that any equities are taken away from the bondholders or preferred stockholders.

The CHAIRMAN. Yes. The question was suggested to my mind because, examining the chart which you have there, I observe that the portion of the column representing preferred-stock holders has been eliminated in the last column. It appears in the others.

Mr. DEL SESTO. They probably redeemed the preferred stock in that year. Yes; the preferred stock was redeemed in 1938. That is why that has disappeared.

Mr. AVILDSSEN. How can the equity be increased by taking away securities from the preferred and the bonds, and so forth?

Mr. DEL SESTO. I think that is quite obvious. Prior to the restatement the cushion, as I say, to protect the senior security holders was \$252,000,000. After the restatement the legal cushion would be only approximately \$71,000,000. After the restatement the company puts itself in the position to pay dividends where probably it would not have been in the position to pay dividends previously.

Now, to the extent that any dividends have been paid, when that situation exists, the equity of the bondholders and preferred-stock holders is being diminished.

Mr. HENDERSON. There has been a repayment of capital to the common-stock holders which presumably was a protection to the preferred-stock holders in the antecedent year.

Mr. DEL SESTO. That's right.

Mr. AVILDSSEN. Technically, those preferred-stock holders and bondholders never had those assets as security for their securities if the stockholders at any time had the right to change the valuation of the stock and call it surplus. If that legal right existed at the time the bonds were sold to them, then we didn't have—you haven't taken away from them anything they had before. If they had it, it is because the common-stock holders voluntarily gave it to them.

Your statement implied that they took something away from a bondholder that he thought he had as security.

Mr. DEL SESTO. That is true.

Mr. AVILDSSEN. I don't see how they could do that.

Mr. DEL SESTO. At the time a preferred-stock holder or bondholder went in, the stated capital was at a larger figure.

Mr. AVILDSSEN. But he knew they had the legal right to change that. His lawyers would tell him "They have the right to change that, so don't pay any attention to that." But in certain States you can't do that. I don't know what the situation is in Illinois now, but it used to be in Illinois that you couldn't do that. You couldn't change the capital stock. You couldn't take that security away from the creditors of the company. It is only in certain States that you can do that.

Mr. DEL SESTO. I think there are only three or four States which require any notice to anybody else but the common stockholders.

Mr. AVILDSSEN. But inasmuch as they could have done that at any time, it was not security for the bondholders.

Mr. HENDERSON. Isn't it customary in an investment counsel's advice as to the purchase of a preferred stock to state very definitely what there is in the way of assets as protection for the preferred? Isn't that one of the factors considered in giving advice as to buying preferred stock?

Mr. DEL SESTO. That's right, and I don't think in the ordinary investment analysis you contemplate a restatement. I think it is something very unusual, and therefore people buy preferred stocks and bonds.

Mr. HENDERSON. As I gather, what you are suggesting is that there has not been anything illegal in this connection. You are emphasizing that all these transactions were legal. These are changes in

the rights of creditors, debtors, preferred-stock holders and bond-holders which take place with ease at the direction of the management.

Mr. DEL SESTO. That's right. Maybe I didn't make that point clear. In all of these restatements there has been nothing illegal or improper under existing law, but I am suggesting to the committee that here we have a loophole in the present corporation laws which makes it comparatively simple for management to perpetuate itself in keeping a steady dividend record when there are in fact, or may not be in fact, any earnings.

Mr. AVILDSSEN. Have you seen any situations like that in the oil industry, in the case of the major oil companies, where they are perpetuating themselves by doing what you describe?

Mr. DEL SESTO. I leave that to your conclusions.

Mr. AVILDSSEN. You have studied them and spent a year on them.

Mr. DEL SESTO. I haven't spent a year on them.

Mr. AVILDSSEN. In the time you have spent on them have you seen anything of that nature?

Mr. DEL SESTO. Eight major oil companies have restated their capital stock.

Mr. AVILDSSEN. That is not answering my question.

Mr. DEL SESTO. Eight of the 20 oil companies studied have——

Mr. AVILDSSEN (interposing). That doesn't answer my question at all.

Mr. DEL SESTO. I would rather you would draw the conclusion on that.

The Pure Oil Co.——

Mr. SHAUGHNESSY (interposing). Before you finish with Sinclair, Mr. Del Sesto, is there any evidence to your knowledge as to whether any independent engineers were employed in connection with that write down?

Mr. DEL SESTO. Not in this company.

Mr. SHAUGHNESSY. Do you know whether it is customary for engineers to revalue properties?

Mr. DEL SESTO. Some of them do. In the case of the Continental Oil Co. they didn't use engineers but they used an accounting firm, Arthur Young & Co. I don't know whether the Consolidated used engineers. But you will notice, in the terms of the reasons given to us, they left it to the discretion of the directors. There is no evidence, so far as I know, that it was done by engineers.

Mr. SHAUGHNESSY. Do you know from your general experience as an accountant whether the courts and public bodies, in reviewing this type of write down, have come to the conclusion that most of the write downs are justified or not?

Mr. DEL SESTO. Well, as you know, there has been very little litigation on this point, for the very obvious reason——

Mr. SHAUGHNESSY (interposing). I said courts and public bodies.

The CHAIRMAN. Let me interrupt there. I hardly think that is a proper question, and I don't think the witness ought to be called upon to express an opinion with respect to it. The testimony which you are giving here is based solely upon the examination of certain facts which were brought out by a questionnaire submitted by this committee. The companies to which the questionnaire was submitted have not, for example, been asked by the committee, nor were they

asked in this questionnaire, to state whether or not engineers had been consulted with respect to the matters that were brought forth in that information.

As I understand your testimony, you are not attempting to criticize the motives of anybody involved in any of these matters.

Mr. DEL SESTO. That is correct, sir.

The CHAIRMAN. You are merely setting forth certain factual data which is clear upon the face of the record and which is permitted by the laws of the States under which these companies are organized.

Mr. DEL SESTO. That is right.

The CHAIRMAN. And you do not attempt to sit here and pass judgment upon the morality of anything that has been done.

Mr. DEL SESTO. That's right.

Mr. SHAUGHNESSY. I withdraw the question.

Mr. DEL SESTO. I call your attention to the reply of the Pure Oil Co., which is quoted on page 6. Pure Oil Co., said:

On June 4, 1932, the shareholders of the reporting company authorized a change in its common shares from shares of a par value of \$25 each to an equal number of no-par-value shares with an assigned value of \$10 each. The reduction of \$15 per share applicable to the outstanding common shares aggregated \$45,575,550, which amount was credited to paid-in surplus. Concurrently, the Board of Directors authorized a charge to paid-in surplus in the amount of \$28,083,742.59 in connection with the revaluation of the company's properties.

You will notice that the company stated that that was done with the approval of the shareholders. We looked at the reply furnished us in connection with stockholders' meetings, and you will notice at that meeting of June 4, 1932, there were 11,173 shares voted by stockholders in person, while there were 3,180,395 shares voted by proxy exercised by officers. So while it is true that the shareholders approved it, actually it was the management alone, for practical purposes, that was present at the meeting.

Senator KING. Do you think that is a fair deduction?

Mr. DEL SESTO. Yes, I do; if the proxies were in the hands of the management group.

Senator KING. Are you arguing there ought not to be proxies obtained?

Mr. DEL SESTO. No; I am just calling the matter to your attention, to see whether or not this committee wants to go into that matter.

Senator KING. All right; proceed.

Mr. DEL SESTO. The Continental Oil Co. reported as follows:

As of October 31, 1932, the officers and others of the personnel of the company, working in conjunction with members of the staff of the company's auditors, Messrs. Arthur Young & Company, New York, made an appraisal of the properties and investments of Continental Oil Company and subsidiary companies. The results thereof were reviewed by the Board of Directors, who approved, and submitted to the stockholders for their approval, a revaluation of assets and reserves resulting in a net reduction of \$61,409,120.50.

The stockholders of the company, at their annual meeting held May 9, 1933, approved the revaluation, and at the same time approved a plan for the revision of the capital structure of the company through a reduction of capital and a change from shares of no par value to the par value of \$5 each, resulting in a charge to paid-in capital and a credit to capital surplus in the amount of \$105,153,900.81. Against this capital surplus there was charged the above amount of \$61,409,120.50 and the accumulated earned surplus (deficit) as of December 31, 1932, of \$13,693,333.95.

Now you will notice that as a result of this procedure, the deficit which was on the books of the company was eliminated and thereafter

the company put itself in the position, if it wanted to, to pay dividends to its common-stock holders.

At that meeting of May 9, 1933, according to the information filed with the committee, there were 543 shares voted by stockholders in person, and 2,681,124 shares voted by proxy exercised by officers of the company.

Mr. O'CONNELL. May I ask a question? Would this transaction, or transactions similar to this one, result in any change in the taxable status of these corporations?

Mr. DEL SESTO. No. None of the practices have any affect on the income-tax law. Such a procedure could not be used to evade or avoid income taxes for the reason that in determining the taxable net income of a corporation you are guided by the tax law and by the regulations under it, and many times the taxable net income as reported on our tax returns does not agree with the net income as reported to stockholders.

I don't mean there is anything improper in that. There are very obvious reasons for it. There are certain types of income which are not taxable which would be reported to stockholders; there are certain expenses which are proper business expenditures which are deductible for reports to stockholders, but may not be deductible for tax purposes. Also, in the computation of such items as depletion in the oil industry, for example, the basis of computing that is fixed by law at 27.5 percent of the gross revenue, whereas the amount of depletion may be computed on some other basis by the company, so that none of these practices would affect the taxable net income reported to the Government.

Mr. O'CONNELL. This practice would have the effect, however, of giving one picture of income for tax purposes—

Mr. DEL SESTO (interposing). This type of practice would accentuate the difference between the tax return and the report to the stockholders.

The CHAIRMAN. Well, now, it is a reasonable thing to assume, is it not, that as of October 31, 1932, the assets and reserves of the company had actually decreased to the amount mentioned in value? This was in 1932. It was 3 years after the depression.

Mr. DEL SESTO. I don't think, Senator, that that was always true.

The CHAIRMAN. That would be a reasonable conclusion.

Mr. DEL SESTO. That's right.

The CHAIRMAN. And the mere fact that there was a revaluation of the assets is not at all an indication that that revaluation was not perfectly proper.

Mr. DEL SESTO. That is true.

The CHAIRMAN. And then it is also reasonable to assume that this earned surplus deficit of \$13,693,000 represents an actual loss.

Mr. DEL SESTO. That is true.

The CHAIRMAN. So that the charging off of the sum of those two figures against the capital surplus is a perfectly proper procedure?

Mr. DEL SESTO. Yes; it was perfectly proper.

The CHAIRMAN. And no criticism arises out of the fact that that was done of itself.

Mr. DEL SESTO. That's right. The point I am suggesting is that from then on it was to all practical purposes a brand new corporation, the same as if it had gone through a reorganization process.

Senator KING. You complain because they didn't go into court or under the Chandler Act and take a reorganization involuntarily, rather than by taking it voluntarily.

Mr. DEL SESTO. I think possibly there should have been some supervision, either by a court or by some regulatory body.

Senator KING. There may be difference of opinion there.

Mr. DEL SESTO. That is true.

The Consolidated Oil Corporation instance I have already discussed.

The Ohio Oil Co., on page 8, also restated its capital stock on May 23, 1935. As a result, the par value of the common stock was reduced from \$100,000,000 to \$60,000,000, and a capital surplus of \$40,000,000 was created. The company reported to this committee that the purpose of this restatement of capital stock was to create a capital surplus for corporate needs.

You notice there also, in summarizing the stockholders who were represented at the meeting, that there were a very small proportion of outside stockholders represented.

Skelly Oil Co. also restated its capital stock. It reported to the committee as follows:

On January 3, 1936, the stockholders authorized the reduction of the par value of the common stock of the reporting company from \$25 to \$15 per share, the reduction of the capital of the company by \$10 per share on the outstanding 1,008,548.6 shares of common stock resulting in the transfer of \$10,085,486 from capital stock to capital surplus; the application of \$4,940,351.39 out of capital surplus to eliminate the deficit of like amount in earned surplus (deficit) as of September 30, 1935.

The purpose of this restatement of capital stock was to provide capital surplus out of which could be applied to earned surplus (deficit) as of September 30, 1935, an amount sufficient to eliminate the latter.

Mr. O'CONNELL. On the line of the question the Senator asked you a few moments ago, if the purpose of a write-down in assets was merely to reflect a diminution in their value, would it ordinarily be accompanied by an increase in the surplus account?

Mr. DEL SESTO. If they restated, in reducing their capital stock, reduced it by the amount simply to cover the amount of write-down of assets, there would be no effect in the surplus account after the write-down. But if they restated to a larger amount than was needed, then there would be an increase in the surplus account.

Supposing they reduced their capital stock by 40 million and only needed 20 million to write down assets. The remaining 20 million would go into the surplus account and would be available for dividends.

Mr. O'CONNELL. Then in all of these cases the write down in the capital stock was more than a sufficient amount to take care of the write down of assets? That difference between the two resulted in the bookkeeping increase in surplus.

Mr. DEL SESTO. And in two of these cases they used the restatement to write down assets and eliminate a deficit.

The CHAIRMAN. There has just been handed to the chairman a letter from Dr. Watkins, who testified yesterday and today, submitting a summary of the import of the testimony as he sees it. He made this request that this be made a part of the record. I am introducing it now, so that it may be printed at the conclusion of this morning's proceedings.

(The statement referred to was marked "Exhibit No. 1319" and is included in the text as testimony on pp. 9603-9604, supra.)

Senator KING. The testimony adduced by the organization of which he was the head?

The CHAIRMAN. Yes.

Mr. DEL SESTO. In the case of the Skelly Oil Co., you will notice that all of these shares voted at the meeting were voted by officers and directors as proxies.

Socony-Vacuum Oil Co. reduced its capital stock in 1934 from \$25 to \$15 per share, and the effect was a transfer of \$317,024,940 from capital stock to capital surplus. The company reported to this committee that the purpose of the reduction was to create capital surplus against which to charge off good-will and appreciation of properties. Against the capital surplus created there was written off the sum of \$228,123,580.68, representing good-will and appreciation of properties, and I list there a summary of the stock that was voted at that meeting.

Now, in the case of the Socony-Vacuum Oil Co. I would like to point out that this restatement occurred a few years later to the merger of the Standard Oil Co. of New York and the Vacuum Oil Co., and I think possibly it might be a fair inference that apparently the merger had been consummated on an inflated basis, and thus it was necessary to write off approximately a quarter of a billion dollars soon after the merger in order to show favorable operating results in the future. This restatement, I think, was only 2 years after the merger, and the company felt it necessary to write off about a quarter of a billion dollars of assets.

This has much significance to your committee. Since mergers and consolidations are generally accomplished by exchange of securities, there is no realistic deterrent to the amount that is paid for the acquisition of other companies, particularly when a few years later the properties can be written down at the will of the management.

Mr. AVILDSSEN. Have you any reason to feel that there wasn't a true deflation in the value of those assets between those two dates? Wasn't there, in fact, a real depression in this country, with a decline in values of all kinds?

Mr. DEL SESTO. This was only 2 years after the merger.

Mr. AVILDSSEN. I know, but a lot of things took place in those 2 years.

Mr. DEL SESTO. And I think in the case of goodwill, for example, they wrote it off entirely.

Mr. HENDERSON. May I suggest to Mr. Avildsen that the earnings of Socony Vacuum were \$5,300,000 in '32; in 1934, at the time of the write-down, they were \$24,000,000.

Mr. AVILDSSEN. That hasn't anything to do with the discussion.

Mr. HENDERSON. It has something to do with the devaluation of the assets if they are on that basis.

Mr. AVILDSSEN. Explain that.

Mr. HENDERSON. If the company made \$5,000,000 in 1932 and \$24,000,000 in 1934, there is some evidence that there hasn't been a reduction in the value of the assets.

Mr. AVILDSSEN. I don't see why not; if these refineries had been overvalued I don't think that follows.

Senator KING. Persons that have been engaged in the mining business, the metal-mining business, and have seen the ups and down of companies; stock worth \$10 today, and perhaps next week or 6 months from now worth only \$1; and then perhaps a year later worth \$15 or \$20; stock going from \$2 up to \$150 and then down again, those fluctuations depending on whether the ore body is continued, or whether the price of metal continues, know there are a hundred factors to be considered which would affect the value of the stock intrinsically or for stock purposes. It seems to me that in the consideration of these questions you have to take into account the situation and the character of the business, and the factors that are involved in the carrying on of these businesses which are more or less speculative and which depend entirely upon whether the deposits are there, what the markets are, and various other factors almost imponderable in character.

Mr. AVILDSSEN. Mr. Del Sesto, what do you think this committee should do about a situation like this? Here is a firm that made a merger. You say, "There is no realistic deterrent to the amount that is paid for the acquisition of the other company." What do you think we should do?

Mr. DEL SESTO. I think, if you find this practice is prevalent, not only in this industry but in other industries, this committee might very well make some recommendations to Congress.

Mr. AVILDSSEN. What should we recommend? What is your recommendation to us?

Mr. DEL SESTO. I am not prepared to make any definite recommendations offhand, but I think possibly along the line Senator O'Mahoney has been thinking of for several years might be the answer, a national corporation law, with some definite teeth in it.

Mr. AVILDSSEN. I am not familiar with the details of that bill. What would it do in the case of the merger of two companies like that?

Mr. DEL SESTO. I think the Senator could discuss that.

The CHAIRMAN. If we are going to get into a discussion of this bill—

Mr. AVILDSSEN (interposing). Mr. Del Sesto says it is very significant to this committee. I would like to know why it is so significant to this committee. I think it is a fair question in view of the testimony.

The CHAIRMAN. If Mr. Del Sesto wants to express his personal opinion as to what his conclusions may be from any set of facts, I have no objection to it, but I do feel that it ought to be emphasized again that as I understand the testimony of the witness, he is not attempting to pass judgment upon the propriety of practices in particular cases. He is using particular instances to illustrate a legal situation. That is it, is it not?

Mr. DEL SESTO. That is true.

The CHAIRMAN. And your testimony is not to be regarded as constituting a reflection, even in your own mind, upon the management of any of these corporations.

Mr. DEL SESTO. That is right.

Mr. AVILDSSEN. I realize that, Mr. Chairman, but he says here that there is no realistic deterrent to the amount that is paid for the acquisition of other companies.

The CHAIRMAN. From what page are you reading?

Mr. AVILDSSEN. I am reading on page 9, about the third or fourth paragraph down. "This has much significance to your committee," and so forth. "There is no realistic deterrent to the amount that is paid for the acquisition of other companies." I would like to know what Mr. Del Sesto had in mind in the way of putting into effect realistic deterrents, because I think management shouldn't pay too much for other companies, I agree with you, but how are you going to do it, what is your recommendation?

Mr. DEL SESTO. As I suggested, speaking offhand, one of the things that could be done might be to have a national corporation law.

Mr. AVILDSSEN. How would that place a deterrent on management?

Mr. DEL SESTO. Let me explain—with some teeth in it, which would prevent these quasi reorganizations excepting as they are reviewed by some competent public authority.

The CHAIRMAN. The whole point, I think, of the situation as developed by this testimony, and as developed by other testimony and is common knowledge, is that where a State like Delaware charters corporations that are engaged in national and international commerce on capital that is raised not from the inhabitants of Delaware but from the citizens of the whole country, we find a situation that permits the management to use assets which belong to hundreds of thousands of people according to very loose canons of responsibility.

Now, may I say for myself, as one of the authors of the so-called Borah-O'Mahoney bill,¹ I don't have the slightest doubt that 90 per cent of business management in this country is actuated by good motives, good intents, and by high concepts of responsibility. I think there is a growing recognition in corporate management of the responsibility management bears to the investor, and to the public, and indeed to labor too. But the point of this testimony is that there exist wide-open loopholes which may be used by those who are not so cognizant of their public responsibility to the disadvantage of the public, and I believe that, so far as I interpret this evidence, it goes no further than to point out what those loopholes are, without in any way reflecting personally upon management involved in any of these cases.

Mr. DEL SESTO. That is true.

Senator KING. And loopholes which challenge the attention, perhaps, or might call attention to the various States in which laws have been enacted for incorporating organizations, and suggesting to them if necessary to make amendments to their acts and to provide against these loopholes.

Mr. DEL SESTO. That is true. I might make one further observation, Senator. It is my understanding that I was not to make any definite recommendations as to what this committee might do. It was my understanding that I was simply to present these facts for your consideration, and so when Mr. Avildsen asks what I recommend, it is a little unfair, because in the first place I didn't give it the thought I ought to give it, and in the second place I don't think I ought to make the recommendations, but this committee ought to make any recommendations it sees fit after getting the facts.

¹ S. 3072, 76th Cong., 1st Sess.: A bill to regulate interstate and foreign commerce by prescribing the conditions under which corporations may engage in such commerce, etc.

Mr. AVILDSSEN. I didn't wish to be unfair. I merely thought you had some ideas and I was anxious to get them, because I would like to put up some realistic deterrents to stop management from paying too much for assets of other companies.

Mr. HENDERSON. May I suggest, without indicating this is a recommendation, that in the case of the public-utility holding companies Congress did enact a statute which was definitely intended to provide a realistic deterrent to just this practice that has been called to our attention by the witness. Part of that derived from the nature, maybe not the import, of the practice that is definitely considered in this revaluation.

Senator KING. It might be wise for those of us who are listening and interrogating the witness to let the witness continue and make our interrogations and our speeches subsequently.

Mr. DEL SESTO. I won't take up the time of the committee other than just to point out that I have summarized the reply of the Tide Water Associated Oil Co. on page 9,¹ and that of the Mid-Continent Petroleum Corporation on page 10,² and Cities Service Co., also on page 10.

I would like now to go to another subject, leaving the matter of revaluations accompanied by restatements, and go to what I call the changing concept of surplus of corporations. I think that is also a matter which probably should receive some consideration of this committee. Traditionally, at least, surplus of a corporation was considered to be the undistributed accumulated earnings of the corporation. At the present time that is not necessarily so. We find in balance sheets of corporations many so-called surpluses. I think in my statement I called them mongrel types of surpluses. Sometimes they are given a distinctive title, such as paid-in surplus, capital surplus, appraisal surplus, and so forth, and those types of surpluses do not represent undistributed earnings. Many times they represent contributions of stockholders, part of the original investment, but nevertheless under the laws of many of the States, these surpluses are available for dividend purposes, and so, as I said previously, the mere fact that a company has a steady dividend record is not at all conclusive that it has actually earned the money to pay those dividends, and in many cases, or in some cases, those dividends might be nothing more than a return of capital.

In connection with the sale of stock, par-value stock and no-par-value stock, State corporation laws provide that part of the consideration received for the sale of that stock can be placed in a surplus account. In the case of par-value stock, generally the amount has to be at least the par value, but anything over and above that may be put in a surplus account. In the case of no-par-value stock there is absolutely no limit to the amount that the directors may allocate to capital and to surplus, so, to take an absurd case or an extreme case, a company might sell stock for \$100, no-par value. The directors may by resolution put \$1 into the capital-stock account, which would be the legal stated capital, and the directors could allocate \$99 into surplus, and thereafter those \$99 would be available for dividends, notwithstanding the fact that the corporation had not earned a single dollar.

¹ Hearings, Part 17-A, p. 9967.

² Ibid, p. 9967.

I think there are only three or four States that require that in any dividends paid from that type of surplus the notice should be given to stockholders, but you will find in the majority of States that no notice need be given to stockholders, so that the rank and file of stockholders may not know that what they are getting on their dividend check is nothing more than what they actually paid into the corporation, and those dividends are not earnings.

Take another illustration. A company may buy out another company by the issuance of stock; let's say it issues \$100,000,000, or let's say the value of the property is \$100,000,000. The directors may allocate 10 million to the capital stock accounts, they may allocate 90 million to the surplus accounts, and thereafter, even though there hasn't been a single transaction, even though the company has not made a single dollar in earnings, the corporation is in a position to pay dividends.

Maybe that practice is all right, but at least it is a practice which is prevalent. It is a practice which is permitted by law, and I think possibly it ought to receive some consideration by this committee.

Mr. AVILDSSEN. Mr. Del Sesto, isn't it a fact that if the balance sheet and income account of such a corporation are prepared by a first-class firm of accountants, that it will appear from such statements and reports that the dividend has been paid out of surplus, if in fact it has?

Mr. DEL SESTO. If you will look at the analysis of the surplus accounts.

Mr. AVILDSSEN. That is right; I admit a lot of stockholders wouldn't do so.

Mr. DEL SESTO. Let me finish the answer please—but there is no requirement under the law, except in a few States.

Mr. AVILDSSEN. I am not talking about the law. I am talking about the practice of a high-class firm of accountants.

Mr. DEL SESTO. Will you let me finish the answer? The stockholder gets his information from the annual report sent to him by the directors. There is no requirement so far as I know that in that report to stockholders there be an analysis of surplus. If the analysis of surplus is included in the annual report, the stockholder can make his own analysis.

Now, in the reports filed with the Securities and Exchange Commission, of course, there has to be an analysis of surplus, but I point out to you that there is no requirement now by which a stockholder, except in a few States, can know of that fact, that what he is getting is part of his own money back.

Mr. AVILDSSEN. That is unless it is listed on a national exchange. If the stock is listed on a national exchange, then the company is required to report the surplus account each year.

Mr. DEL SESTO. To the Securities and Exchange Commission and to the stock exchange, but there is no requirement—

Mr. AVILDSSEN (interposing). Not to stockholders?

Mr. DEL SESTO. Not to stockholders; no, sir. It is my understanding that there is no jurisdiction on the part of the Securities and Exchange Commission, for example, over the annual reports to stockholders excepting as they might be filed with the Commission in connection with proxy statements and things of that type.

Mr. HENDERSON. That is correct, Mr. Del Sesto; but I would like to point out also that some corporations that have many changes in their

surplus account during the year, like United States Steel, for example, have gone beyond what the legal necessity is and have undertaken to furnish the stockholders with an analysis of changes in surplus account so that the stockholder may be intelligently advised.

Mr. AVILDSSEN. Mr. Del Sesto, you have seen a lot of the annual reports of the major oil companies. Have you noticed any that omitted analysis of the surplus account?

Mr. DEL SESTO. I might say that in my study of surplus accounts I didn't look so much at the annual report as I did at the analyses which we required in the questionnaire.

Mr. AVILDSSEN. Do you recall seeing any annual reports which omitted an analysis of the surplus account?

Mr. DEL SESTO. I can't speak offhand with respect to all companies, but I might point out this—that since 1933, which was the year of the passage of the Securities Act, there has been a distinct improvement in the annual reports submitted to stockholders, and probably the Securities Act had considerable effect on that.

Take the Standard Oil of New Jersey as an illustration. Prior to 1933 there was no surplus statement in the annual report to stockholders. Subsequent to 1933 there was. In the committee's questionnaire there was a question which asked the companies to state if since 1929 they had issued any original issues of stock and had carried any part of the proceeds to a surplus account. Nine of the companies reported that they had, and the appendix I which I have submitted and which is already in the record quotes verbatim the replies which these companies gave to us.

Again I would like to point out what these companies did—not improperly; it was perfectly permissible under the law; but they did allocate part of the proceeds to capital and part of the proceeds to surplus; and I don't mean to imply again that that surplus was immediately used for dividends; but it is available for dividends, the same as if the surplus had been actually earned.

Mr. AVILDSSEN. You see no evidence of any company's paying out such paid-in capital in the form of dividends?

Mr. DEL SESTO. No; not of these nine companies.

In view of the lateness of the hour, Senator, I won't read the replies, but the replies are summarized on page 12 of the statement, and they are also included in appendix I, which has been filed in the record.

Going from the legal phases of the surplus account, I would like to go to the accounting phases of the surplus account. Many corporations are able to maintain an appearance of relative stability in current earnings by using the surplus account as a convenient dumping ground for so-called adjustment and extraordinary charges. Thus it is a comparatively simple matter to divert current charges from the current-income account and through the back door to the surplus account. In other words, if a company has a large expense in one year which it may consider extraordinary, there are no definite standards now of what should go into the income account and what should go into the surplus account, so as a result a company may carry that charge to the surplus account and it will not be reflected from the total income account.

The effect of that is this: In reporting the earnings of corporations, the earnings are generally reported on a per-share basis. You pick up a financial paper and you see the earnings of X corporation this

year were \$4 per share as compared with \$3 last year. In computing those earnings per share, no consideration is given to those surplus adjustments, and so, consequently, there is a potential danger of misrepresentation of what the earnings of a corporation actually are.

Mr. AVILDSSEN. Mr. Del Sesto, don't you think we ought to say this? I don't know if it appears in your statement but it seems to me the record should show that it isn't always the management that decide whether these things should be charged to current income or to previous year, but in most cases, from my experience, it is the firm of accountants who have been employed to prepare the financial statements. For instance, in the case of my own little company out in Chicago, Price, Waterhouse Co. were our accountants and they were the ones who decided whether an item should be charged to surplus or against the current-year's earnings. We have nothing to say about it.

The CHAIRMAN. Perhaps we ought to find out whether yours is a Delaware corporation.

Mr. AVILDSSEN. It isn't, it is a Michigan corporation.

The CHAIRMAN. I was going to remark that Illinois has a very good incorporation law. I don't know so much about the Michigan law.

Mr. DEL SESTO. To get back to your question, I don't think that is true of the larger corporations. I think the practice in the larger corporations is that the financial statements are prepared by the management and the accountants merely certify to the financial reports prepared by the management.

Mr. AVILDSSEN. Do you think that a firm like Price, Waterhouse would certify to a charge to surplus of an item which they thought wasn't proper? I am not worrying about the McKesson-Robbins case, I know what you have in mind, but that was a different proposition altogether, that was a question of physical inventories, but there has been nothing against Price, Waterhouse so far as book entries are concerned, and so forth.

Mr. DEL SESTO. The point I am trying to make is that there is no definite standard now as to what is a surplus charge and what is not a surplus charge.

Mr. AVILDSSEN. But that is a very serious matter. A large, reputable accounting firm is not going to charge a thing to a previous year just because the management asks them to.

Mr. DEL SESTO. I would rather you wouldn't put it on the basis of any individual company.

Mr. AVILDSSEN. I think that is a serious thing when you say the management does it, when in fact I think it is done by a firm of outside experts who are called in to pass on the propriety of the charge, and so forth.

Mr. DEL SESTO. As I said, in the case of the larger corporations the firm of accountants do not prepare the statements; that is as a general rule, statements are prepared by the management.

Mr. AVILDSSEN. Yes; but they pass on it. If the management prepared an improper statement they wouldn't certify it.

Mr. DEL SESTO. They certify them.

Mr. AVILDSSEN. If they are certified to as proper, it doesn't make any difference who prepared them.

Mr. DEL SESTO. They certify it and if they disagree they note their exceptions in a certificate. Now, with respect to surplus account, regardless of who prepares the statements, whether management or the public accountants, the difficulty is that there is no definite standard. For example, I have here a statement of accounting principles put out by Sanders, Hatfield & Moore, published by the American Institute of Accountants, which is considered quite authoritative. The only standard given in that statement is this, that if the amount is large, you carry it to surplus, and if it is small, you carry it to the income account which I submit is not really a good standard at that.

As a result of that, I point out in the statement that some accounting authorities are suggesting that where you have surplus adjustments, so that you distort the income account, that you go back and amend your financial statements for the past years, and give your stockholders comparative amended financial statements. In other words, you can't avoid these corrections which have to go through the surplus account. Other accounting authorities are of the opinion that there should be no surplus charges at all, that everything should go through the income account, and that the stockholder ought to see definitely what expenses have been incurred during the year, whether they are normal or extraordinary, and in that way when you report earnings per share, due consideration will be given to all types of expenses, whether they are extraordinary or normal.

There are many differences of opinion as to what charges to surplus should be and as I point out in the statement, sometimes the reported earnings are so small and the charges to surplus are so substantial that it would take very little difference in opinion to change a reported profit into a reported loss, and I cite as an illustration the case of Standard Oil of New Jersey. In 1932 it reported to its stockholders a net profit of only \$282,000 out of a gross operating income in excess of \$1,000,000,000. But during the same year there were net surplus adjustments of over \$2,500,000. If some of those surplus adjustments had been carried to the current income account, that company would have had loss that year, would have reported a loss, and in that way a steady record of current earnings would have been disturbed.

Mr. AVILDSSEN. Do you know anything about that particular item? You say you have seen some of the statements of Standard of New Jersey. Do you know what explanation they gave?

Mr. DEL SESTO. There was nothing in the annual report. Again I am not implying anything improper.

Mr. AVILDSSEN. But their annual report did not show it?

Mr. DEL SESTO. The annual report did not show what the surplus adjustments were. The questionnaire to the committee did give those charges.

Mr. AVILDSSEN. I thought you said the annual report did show analysis of surplus accounts.

Mr. DEL SESTO. Subsequent to 1933. This was in 1932. Did you want those charges?

Mr. AVILDSSEN. You see no explanation.

Mr. DEL SESTO. In the reply to the committee, but not in the annual report to the stockholders.

Mr. AVILDSSEN. If you can tell us in a few words.

Mr. DEL SESTO. I will just point out some of the larger amounts. Where exchange adjustments arising in the conversion of amounts of foreign subsidiaries, United States dollars, \$5,700,000.

Reversal of the amount by which South American profits of a subsidiary company were written up in 1920, \$13,700,000.

Bad debts written off and reserves provided for claims and other receivables, \$1,616,000.

Loss on sale of investment securities, \$188,000.

I am sorry, that ought to be write-down of investment securities, \$188,000.

Mr. AVILDSSEN. Let's take the two largest items, totaling about 18 million. You say that there was improper charging of those to surplus? Or do you think they would be a proper charge against the income for the year 1932?

Mr. DEL SESTO. I think accountants might differ on that.

Mr. AVILDSSEN. What is your opinion, I mean.

Mr. DEL SESTO. I think same accountants would feel—

Mr. AVILDSSEN (interposing). What is your personal opinion?

Mr. DEL SESTO. I think some of those charges could very properly have gone to the income account.

Mr. AVILDSSEN. Some of them. There are only two; which of those two? Are they proper charges against the year 1932 or aren't they? That is what I would like to know.

Mr. HENDERSON. I submit, Mr. Chairman, that no accountant in my experience could make a determination as to proper allocation with just the simple statement of the account named. I don't believe that any account—

Mr. AVILDSSEN (interposing). If Mr. Del Sesto wants to say he doesn't have enough information that is all right.

Mr. DEL SESTO. I would prefer not to answer the question except in this way, that there might be differences of opinion amongst the accountants.

Mr. AVILDSSEN. I didn't care about that. I wanted to know what you thought of the adjustment. If you don't have sufficient knowledge to pass on it, that is another matter. Apparently it is plain you have not sufficient knowledge there from the transactions.

The CHAIRMAN. May I remark here again that the significance of this testimony, as I get it, is not the opinion of the witness as to the propriety or impropriety of practices of this kind, but the fact that there is no national standard to govern these things. In other words, here are corporations which are obviously national in their scope, which handle large properties, assets of almost unimaginable size in some instances, the operation of which affects a large segment of the public, consumers and those who are employed in the corporations, and yet there is no national standard of accounting, though accounting is obviously a matter of tremendous importance.

Senator KING. Accountants themselves differ just as lawyers differ, just as engineers differ, as to the value of a piece of property or the continuity of a vein in the ground.

The CHAIRMAN. That, of course, is true.

Mr. AVILDSSEN. I feel that Mr. Del Sesto's statement as it appears here would possibly give someone reading it the impression that maybe the Standard Oil Co. should have shown a loss of about

\$21,000,000 that year instead of breaking even, and I just wondered if he had a definite opinion on that subject, whether he had examined the charge enough to tell us. When I first read that I got the impression that probably they should have shown a loss. Now Mr. Del Sesto admits that he hasn't sufficient knowledge to know whether or not they shouldn't.

Mr. DEL SESTO. Maybe I had better clear that up. You notice I state there that sometimes the reported earnings are so small and the adjustments to surplus are so large that it would take very little difference in opinion to shift a reported profit to a reported loss. I gave Standard Oil of New Jersey as an illustration where the reported profit is only \$280,000. Yet the surplus adjustments were \$20,500,000. It would have taken only a small shift to turn it into a loss. I don't say that those adjustments weren't proper, but in the absence of any standards, any definite standards, it is pretty hard to determine, even if the facts were known, what charges should go to surplus.

Mr. AVILDSSEN. Do you know what firm certified that report that year?

Mr. DEL SESTO. I think it was Price, Waterhouse.

Mr. AVILDSSEN. They made no exception to that surplus adjustment, so that was in their opinion a proper charge to surplus.

Mr. DEL SESTO. That is true.

Mr. HENDERSON. I think I ought to say for the record in connection with those items that were read in the registration statement, some of them very definitely raised questions in the S. E. C., as to whether they were charging some of those things not to surplus but to a current income account.

Mr. DEL SESTO. Going a little further into this accounting matter, I point out that getting away from surplus alone but in the whole subject of accounting, we find that in the petroleum industry there was no uniform method of accounting. Although the American Petroleum Institute has published a uniform system of accounts, it is apparent that such a system has not been generally adopted by most of the larger companies in the industry. Not only is there a lack of uniformity among the various companies in the industry, but even individual companies have not maintained consistent accounting policies from year to year. Consequently, comparisons of financial data between companies within the industry and even comparisons of one company's financial reports of one year with those of another year cannot be made on the same basis. Because of the great flexibility in accounting policies, it is difficult at times to ascertain how much of the reported profits are real and how much are due to accounting policies or methods; and whether a reported profit is actually a profit, or whether it is in fact a loss.

That observation is not only my own observation, but also an observation made by Standard Statistics. It made a review of the oil industry and it reviewed the profits and losses and it qualified the data, saying that because of these changes in accounting policies and this lack of uniformity, that the data had very little value. Since each company may determine for itself its own accounting policy, and it may vary this policy at will, earnings may be either overstated or understated, depending upon the whims of a particular management or the expediences of the moment.

I suggest that in this statement, and it is merely a suggestion, this committee may want to consider possibly enlarging the authority of the Securities and Exchange Commission with respect to accounting. It is my understanding that the Commission now has authority to prescribe accounting insofar as it affects the reports which are filed with the Commission, but that it does not have the same authority as the Interstate Commerce Commission has with respect to describing the manner in which these accounts should be kept, and neither has the Commission the same authority with respect to the general corporations as it has with respect to the utility companies under the 1935 act, and I just submit that as a consideration of the committee. I also suggest to the committee at that time that possibly some thought ought to be given to the annual reports submitted to stockholders. As I have previously said, while the S. E. C. can require the correction of reports filed with it, it has very limited if any authority over the reports given to stockholders, and there probably ought to be some step along that line.

I have cited in this statement —

The CHAIRMAN (interposing). It is true, of course, that the S. E. C. cannot exercise authority nor can Congress give the S. E. C. authority except so far as the power of interstate commerce clearly goes, to control what may be in the jurisdiction of the State which charters the company with respect to the structure of the company and what it may do.

Mr. DEL SESTO. The S. E. C. and the members of the committee are better qualified than I am to point that out. It has a little broader power. It is not only related to the interstate commerce power but also related to the mail power and things of that kind.

The CHAIRMAN. To Federal power.

Mr. DEL SESTO. That is right, so it can with respect to companies under its jurisdiction probably make those changes which I have suggested.

The CHAIRMAN. It is illustrated by the fact that those who want to organize a company could go to Delaware and obtain a charter with the very broadest powers, with various classes of stock, some of which would be distributed to the incorporators at little or no cost, and with complete voting power, the rest distributed to the public at much larger cost for the purpose of raising capital; the S. E. C. can do no more than require that the prospectus set forth the facts, but if the state law permits it, then it may be done and the stock may be sold broadcast throughout the country.

Mr. DEL SESTO. In the statement which I have presented, pages 15 to 18,¹ I have given certain illustrations of the changes in accounting policies. Again in presenting those illustrations I don't do it with the idea of criticizing these companies or suggesting that there was anything improper, but I do suggest that changes in accounting policies are not merely academic; the changes in accounting policies may have substantial effects on the operating results of a company. I think, for example, one of the cases which was mentioned was one in which the change in accounting policy affected the earnings by an amount of at least \$10,000,000. I suggest that possibly there might be a possibility of abuse in allowing a company without any standard at all to change its policy at will.

¹ Hearings, Part 17-A, p. 9970 et seq.

I won't take the time to read those, but they are given in this statement for that limited purpose, to show, first, the effect of changes in policy; and, second, the effect that change in policy might be abused.

We have already talked about representation at stockholders' meetings. This committee submitted a questionnaire to the oil companies and asked them to state the number of shares of capital stock voted by stockholders in person, the number of shares of capital stock voted by proxy exercised by company officers and directors, the number of shares voted by proxy exercised by other than company officers and directors, and the total number of shares of stock voted by each officer and director at each meeting, both as to personal holdings and by proxy.

The detailed replies furnished by 18 of the reporting companies have been submitted to this committee and are part of appendix II of the statement which I introduced in the record.¹

The replies received from the major oil companies indicate conclusively that the management participates practically alone at stockholders' meetings, and that on the average stock represented at stockholders' meetings by persons other than the management represents less than 1 percent of the total.

The replies also indicate, in the case of many of the major oil companies, that it is the practice even among the officers and directors to give proxies on the stock owned by them to the proxy committee. Thus it is apparent that for all practical purposes large corporations are in the control of the management group with no interference or supervision on the part of the great body of stockholders.

Another subject which was covered in the committee's questionnaire had to do with the compensation of officers and directors. The committee requested that the companies report the total amount paid to officers and directors during the period 1929 to 1938. The information submitted by the companies has been tabulated in the tables starting on page 29² and the tables compare the compensation paid to officers with the net earnings applicable to common stock and with dividends paid on the common stock.

Without going into any detail with respect to the tables submitted, I would like to say that we can make certain generalizations: (1) The compensation paid to the management group as represented by officers and directors does not fluctuate in direct proportion to either the net earnings applicable to the stockholders or the dividends paid to the common stockholders; (2) compensation paid to the officers and directors is more stable and does not fluctuate as widely as either net earnings or common-stock dividends; (3) in 1938 the trend of compensation paid to officers and directors was generally on a higher level than that of 1929, while the net earnings were on a lower level than that of the earnings of 1929.

I have on pages 19, 20, and 21 of the statement summarized the comparison between 1929 and 1938.³

We also found in the replies to the questionnaire that 17 reporting major oil companies stated that they had bonus or profit-sharing plans, in which the management group participated during this period. I might say that some of the profit-sharing plans were not

¹ Ibid, p. 9978 et seq.

² Ibid, p. 9972 et seq.

³ Hearings, Part 17-A, p. 9993 et seq.

for the management group alone, but that other employees were permitted to participate.

Those plans are summarized on pages 22 through 26.¹

Mr. HENDERSON. They are summarized by individual companies, so that the distinction as to coverage of the plan may be noted.

Mr. DEL SESTO. That is right. In many cases we quoted verbatim the replies as given to us. We made no attempt to draw any generalizations from the plans, because the plans were more or less individual and there was very little in common among the various plans.

Mr. O'CONNELL. Several of them are no longer in effect, too. Isn't that true?

Mr. DEL SESTO. Yes; some of them are in effect on the books, but the earnings aren't there, so that there is no distribution. Then one of the companies also pointed out that it did not have a bonus plan or profit-sharing plan, but it had a stock-purchasing plan, but that plan was available not only to officers and directors but also to other employees. That was the Standard Oil Co. of Indiana, and its reply is tabulated on pages 27-28 of the statement.²

That, Mr. Chairman, concludes the first part of the statement, statement A, and it will take me only a few more minutes to cover statement B. I don't intend to go into any detail.

The CHAIRMAN. Very well, you may proceed.

Mr. DEL SESTO. I hope to finish this afternoon on this whole subject. In addition to reviewing the broad financial reports submitted to the committee, I was asked specifically to review the questions which had to do with the cost of gasoline at the refinery gate and the costing policies of the oil companies and also with the question, Which of the four branches of the petroleum industry are profitable and which are not profitable, and is any one branch of the industry used to subsidize another branch or branches of the industry?

On the whole, I would say, Mr. Chairman, that the replies were not entirely satisfactory, and that there is still a great deal more that the committee would like to know on this subject. I point out that this matter of determining unit costs of gasoline, for example, is of quite a great deal of importance at the present time. There has been a great deal of discussion of proration. We know that proration affects price and to some extent possibly is guided by the price of gasoline, and yet we have apparently no definite standard of what the price of gasoline is.

I might tabulate the replies that we received.

The CHAIRMAN. Do you mean to say that proration may be affected by the price of gasoline or by the price of crude?

Mr. DEL SESTO. The price of crude and also the price of gasoline, because in the price of gasoline, of course, there is the price of crude. The point I am trying to make—

The CHAIRMAN (interposing). I was merely thinking that the testimony which I recall with respect to price related almost entirely to the price of crude. I don't recall any testimony on the price of gasoline with respect to proration.

Mr. DEL SESTO. Well, but in the price of gasoline the biggest element is the price of crude, and the point I am getting at is this, that in the replies that we have received we don't know yet what the price

¹ Hearings, Part 17-A, p. 9974 et seq.

² Ibid, p. 9978.

of gasoline costs, and that is true in all branches of the industry so that we don't even know what it costs to produce oil at the well. There is some handicap in the operation of proration plans. In other words, I am pointing out that if what these companies say is true, there are no accurate costs at any stage of the oil industry, either at the refinery gate or at the well.

Of the 20 major oil companies, two companies did not reply to the committee's questionnaire with respect to the cost of gasoline. These were Standard Oil Co. of California and Mid-Continent Petroleum Corporation. Three companies stated that unit costs could not be determined. These companies were Shell Union Oil Corporation, Sun Oil Co., Union Oil Co. of California. Three companies stated that unit costs could not be obtained but did furnish unit costs used for inventory purposes. These companies were the Atlantic Refining Co.; Socony-Vacuum Oil Co., Inc.; Tidewater Associated Oil Co. One company did not furnish the unit cost per gallon of gasoline, but did give us the average unit cost per barrel of crude, without breaking it down into the various products coming out of that barrel of crude. That was the Gulf Oil Corporation.

Ten companies did furnish unit costs, and these companies were Empire Gas & Fuel Co., Consolidated Oil Corporation, Continental Oil Co., the Ohio Oil Co., Phillips Petroleum Co., Pure Oil Co., Skelley Oil Co., Standard Oil Co. (Indiana), Standard Oil Co. (Ohio), the Texas Corporation.

One company furnished us the aggregate cost of operating its refineries or the refineries of its subsidiaries, but it did not show the unit costs of producing gasoline at those refineries, and it stated that it would submit these costs a later date. That was the Standard Oil Co. of New Jersey.

In the case of the oil companies which did furnish us unit costs of gasoline, we have tabulated those unit costs in Table A which is included, as part of statement B starting on pages 17, 18, and through 21.¹ In addition to tabulating these unit costs, I have submitted as part of the record, as appendix I to this statement, the detailed replies of all the companies, both majors and nonmajors, on this subject, even in the case of those who said they could not furnish unit costs.

I might point out that the unit costs of gasoline at the refinery gate vary. I think if you will look at the entire table you will find the cost of gasoline at the refinery gate varies from approximately 4 to 7 cents. No doubt the size of the refinery and the location of the refinery has a great deal to do with that. Even within the same State you will find considerable variation as to cost. For example, in table A, on page 17, you find that the Consolidated Oil Corporation has a cost of \$0.0553 at the Parco, Wyo., refinery, whereas in the case of the Ohio Oil Co., on page 18, with its refinery at Lovell, Wyo., its cost was \$0.067 plus.

I also would like to state that in connection with these unit-cost figures, many of the companies furnished detailed qualifications, and all of those qualifications, in fairness to the company, have been included in appendix I and I think that table ought to be read in conjunction with the appendix, so as to give full consideration to the qualifications indicated by the companies.

¹ Hearings, Part 17-A, pp. 10043-10045.

The CHAIRMAN. That is in appendix I?¹

Mr. DEL SESTO. Yes; that is already in the record.

I have also in the statement included some excerpts from letters received by some of the oil companies that stated they could not determine the costs, and I have quoted that to show what their reasons for saying that costs could not be determined were.

The CHAIRMAN. Would you summarize some of those reasons?

Mr. DEL SESTO. The primary reason seems to be this, Senator, that in the refining process you start off with a barrel of crude and you come out at the other end with a number of products. The whole process is one process or one continuous process, so they say, "We can determine the total cost of the refinery, but when we come to attempt to allocate the costs among the individual products we have difficulty because the products were all produced at one time, produced simultaneously, so we have this difficulty of allocating costs," and they say although methods have been devised by which these costs can be allocated, the methods are arbitrary and they refuse to use those methods or some of them feel that those methods are so arbitrary that to give you any figures based on those methods would not be fair to them and would be of little value to the committee.

I might in that connection point out, however, that one of the witnesses before this committee, I believe it was Mr. Wilson,² the refinery witness of the A. P. I., did go into some detail with respect to refinery costs and he did suggest there were three commonly accepted methods of obtaining costs, and while he pointed out that there may be some quarrel as to those methods, those methods did produce costs which were at least of some value to the management in determining its policies.

I might say also, incidentally, that that problem of allocating costs in a process like the refining process is present, however, not only in the refining process of the oil industry but is available in every chemical plant where several products come out of the same process and is also present in other industries where a number of byproducts are made incidental to a main product, and I might suggest that if the premise of those oil companies is taken as correct, that you cannot determine costs, you have no cost accountant—

The CHAIRMAN (interposing). Are you familiar at all with the meat-packing industry byproducts?

Mr. DEL SESTO. No, not to speak authoritatively. As I was saying, if the premise is correct that you cannot determine costs in the refining process, then you would have no cost accounting, you probably wouldn't have any accounting at all. While those methods may be termed arbitrary and may not be exactly scientifically correct, they do give workable results and I believe most industries do use those figures.

The second part of this statement—

Mr. SHAUGHNESSY (interposing). Would there be any place in normal accounting of one of these companies which would show the costs applicable, say, to the producing or refining end of the business?

Mr. DEL SESTO. This is the second point I was getting to. The first part had to do with the unit cost of gasoline at the refinery gate.

¹ "Exhibit No. 1313," printed separately as part of Hearings, Part 17-A.

² Robert E. Wilson, president, Pan American Petroleum & Transport Co., whose testimony appears in Hearings, Part 15.

The second part has to do with the committee's supplementary questionnaire which asked the oil companies to classify their assets by branches of business and also to classify their income by branches of the industry. There again the replies were not at all uniform. Out of the 20 major oil companies, three companies did not furnish any information at all. These were Standard Oil Co. of California, Mid-Continent Petroleum Corporation, Atlantic Refining Co. Four companies stated that it was impossible to classify either the assets or the income by branches of the industry. These companies were Standard Oil (New Jersey), Sun Oil Co., The Texas Corporation, Tidewater Associated Oil Co.

Two companies reported that while assets could be classified according to the various branches or departments of the business, it was impossible to classify income. These companies were Socony-Vacuum Oil Co., Inc., and Shell Union Oil Corporation.

There were 11 companies, however, which did furnish the analysis of assets and income by various branches of the industry, and these companies were the subsidiaries of Cities Service Co., Consolidated Oil Corporation, Continental Oil Co., Gulf Oil Corporation, Skelley Oil Co., Standard Oil Co. (Indiana), Standard Oil Co. (Ohio), Union Oil Co. of California, The Ohio Oil Co., Phillips Petroleum Co., the Pure Oil Co.

I have in the statement on page 10 summarized the replies of these 11 companies. It seems apparently that, based on this information, the transportation branch shows the highest rate of return in domestic operations, and when I say rate of return I mean the income prior to interest and dividends based upon the total assets used in that branch of the business, and using that test we find that the transportation branch is the more profitable in the case of most of these 11 companies that did furnish the data, and in the table which I have submitted I have indicated the year in which these companies had the highest rate of return in the transportation branch.

Also, we found that in the marketing branch the lowest rate of return was obtained in the case of these 11 companies that reported to the committee, and in the table on page 10,¹ the second table, I have listed the companies and have indicated the years in which those companies had the lowest rate of return in the marketing branch. These two tables are in summary form only, and I have submitted for the record already appendix II of this statement,² which gives in detail the replies furnished by these companies, and I have also included the replies given to us by the non-major companies.

I might say that the data of the non-major companies was not of much value in this analysis because not many of them were in all four branches of the industry; they were generally in one, two, or three branches.

Also in this statement, starting with page 11 and through 16.³ I have tabulated the replies showing the amount or the percent reported by the companies as the percent of profit or rate of return in these various branches.

I want to point out and make it very clear that these are not my figures; they are not my own computations; they are the figures as

¹ Hearings, Part 17-A, p. 10039.

² "Exhibit No. 1311," printed separately as part of Hearings, Part 17-A.

³ Hearings, Part 17-A, pp. 10040-10043.

reported by the companies themselves, and we have made no adjustments of those figures. We offer them to this committee for your consideration.

The CHAIRMAN. Do I understand that you are referring now to the percentages?

Mr. DEL SESTO. Yes; starting on page 11.¹

The CHAIRMAN. Take the first one, the Arkansas Fuel Oil Co. and subsidiaries for 1936. Was it the company which calculated the varying percentages?

Mr. DEL SESTO. Yes. In other words, the committee's questionnaire required that the companies compute that, and that was to avoid any difficulty that we might be using the wrong base or that we had adjusted the figures.

In all fairness to the companies that did submit this data, I should say here again that some of these companies did qualify the information which was submitted; some of them, for example, said that this information had limited value, that they in some cases didn't have these particular figures on their books, but they merely prepared these figures for the committee, and so that in the study of these figures, these percentages, I think you ought to consider the appendix and take into consideration the comments which the companies have furnished.

I think that covers that.

In closing, I would like to make this observation, that I have tried so far as possible to make an objective presentation of the material and I have tried to highlight some of the more important issues that were presented by the material furnished by the oil companies. As I conceive it, it was not my function to make any definite recommendations to the committee or to express opinions, but merely to present this data and to raise some questions which I thought were of importance and which I thought might be considered by this committee in its broad study of the concentration of economic wealth and power.

The CHAIRMAN. Are there any further questions?

Mr. SHAUGHNESSY. Is there any point in the companies' normal accounting where it would be required to take into account the profits made by the various branches?

Mr. DEL SESTO. It would seem to me that from an operating standpoint, a company should know how it is operating in its various branches.

Mr. SHAUGHNESSY. How about the inventory?

Mr. DEL SESTO. I was going to get to that, and that also in pricing inventory a company has to know the costs of its product at its various stages, because these companies are continuing companies and at the end of the year when they come to prepare their tax returns and reports to stockholders, they have to know the cost of the products at the various stages because the common practice in valuing inventory is cost or market, whichever is lower and the company would not be in position to prepare its stock returns or its reports to stockholders unless it knew the value of its inventories at the various stages of the business.

Mr. SHAUGHNESSY. Do you know what the practice is in the oil industry?

¹ See footnote 3, preceding page.

Mr. DEL SESTO. Some companies do value inventory at cost or market, whichever is lower, and I think that is common practice.

I think some few companies take the position that any intercompany profits that might be in the inventories are so small they would not affect the income account substantially, and it would require too much time to eliminate the intercompany profits. I think those companies were in the minority.

Mr. SHAUGHNESSY. Are the companies that are in the minority in accord with accounting practice?

Mr. DEL SESTO. No; I think the generally accepted practice in accounting is to value inventories at cost or market, whichever is lower, and that would mean the exclusion of any intercompany profits.

Mr. O'CONNELL. For tax purposes, would these companies have to do that, inventory at cost or market? If that is so how do the companies operate that say they have no costs?

Mr. DEL SESTO. I think that is so unless the Commissioner of Internal Revenue has made some exception in their case. I think that under the regulations the Commissioner has that authority and from a tax standpoint this thing would work itself out over a period of years, but as a general rule it is cost or market.

Mr. O'CONNELL. In the long run, the inventory at the intermediate stage wouldn't make so much difference, the value given to inventory.

Mr. DEL SESTO. So long as a company used the same basis each year it would make very little difference from a tax standpoint what basis was used, so long as it was a consistent policy.

The CHAIRMAN. From your examination of the responses to the questionnaires, would you care to make any statement on the accounting practices of the large and small companies, comparatively speaking?

Mr. DEL SESTO. I don't think we can draw the line there, Senator. One of the things that impressed me quite a bit is that you can't generalize between large and small companies. You more or less have to take each company and study it individually.

The CHAIRMAN. It is clear that there was a variation of accounting methods among all of the companies irrespective of size, and some had accounting methods of one character and some of another.

Mr. DEL SESTO. That is right.

The CHAIRMAN. And your own opinion as to the value of these practices might have varied.

Mr. DEL SESTO. That is true.

The CHAIRMAN. And that was irrespective of size?

Mr. DEL SESTO. That is right, and I point out that so long as you have this variation in accounting, and it exists not only in the oil industry but in every large industry, it will always be difficult for any committee of this type to make a proper analysis of financial data, because, first, you can't make comparisons between companies, Company A with Company B, because they may not be on the same basis. Neither can you make comparisons of the same company over a period of years, and unless there is some definite uniform system of accounting within the industry you will always be faced with the problem that any financial data are subject to many reservations.

The CHAIRMAN. Are there any other questions? You have nothing to add?

We are very much obliged to you, Mr. Del Sesto.

(The witness, Mr. Del Sesto, was excused.)

The CHAIRMAN. The committee will now stand in recess until Monday morning at 10:15, when Mr. Farish will be the witness.

(Whereupon, at 5:30 p. m., the hearing was adjourned, to reconvene on Monday, October 23, 1939, at 10:15 a. m.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

MONDAY, OCTOBER 23, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:40 a. m., pursuant to adjournment on Friday, October 20, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman); Representative Sumners (vice chairman); Senator King; Representatives Reece and Williams; Messrs. Henderson, Lubin, O'Connell, and Brackett.

Present also: Representatives Mapes (Michigan) and Disney (Oklahoma); Quinn Shaughnessy, representing the Securities and Exchange Commission; Willis Ballinger, representing the Federal Trade Commission; Robert McConnell, representing the Department of Commerce; W. B. Watson Snyder, Hugh Cox, F. E. Berquist and Christopher Del Sesto, Special Assistants to the Attorney General; Leo Finn and Roy C. Cook, Department of Justice.

The CHAIRMAN. The committee will please come to order.

This morning our witness will be Mr. William S. Farish, president of the Standard Oil Co. (New Jersey). Would you be good enough to be sworn, Mr. Farish?

Do you solemnly swear that the testimony you are about to give in this proceeding shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. FARISH. I do.

Mr. Cox. Before Mr. Farish starts, it might save time if I made some formal statements for the record with respect to some documents that we think should be in the record and are not now there. They have nothing to do with Mr. Farish's testimony, but before the hearing is over I would like to put them in. Perhaps this is as good a time as any.

The CHAIRMAN. Very well.

Mr. Cox. There has been a great deal of reference here throughout the testimony relative to the answers which the committee received to the questionnaires sent out to various oil companies. I think, in order that that discussion may be intelligible and the evidence all be a part of the record, it would be appropriate to offer for the record the original answers, the supplemental answers, the exhibits, annual reports, maps, charts, and other documents, which were submitted to the committee by the oil companies to whom the questionnaire was sent. I think the bulk of these documents makes it inadvisable to have them printed, but I suggest that they be accepted for the record, so that they may be a part of the record and be available as public records.

I suggest that the way to do this is for me to make an offer now of those original answers, supplemental answers, exhibits, annual reports, maps, charts, and other documents submitted to the committee by this list of oil companies which I now hand to you, sir.

The CHAIRMAN. It may be desirable to print the list of the companies which have answered the questionnaire, but the other material will be received for the record. Without objection it is so ordered.

(The voluminous record of economic data referred to was marked "Exhibit No. 1320" and is on file with the committee. The list of companies answering the questionnaire is included in Hearings, Part 14, appendix, p. 7426.)

Mr. Cox. The second item that I think I should call to the committee's attention has to do with exchanges of gasoline. Members of the committee have asked a number of questions about the extent to which gasoline is exchanged by the major companies, and after exchange sold under brand names. The other day Mr. Snyder made certain statements with respect to that matter which were based on some information which the Department of Justice collected before the hearing was organized to proceed on a different basis. I think perhaps it might be well, then, to offer certain material which we have that deals with that matter.

I offer now for the printed record photostatic copies of the answers of the Atlantic Refining Co., Cities Service Co., Consolidated Oil Corporation, Continental Oil Co., Gulf Oil Corporation, Ohio Oil Co., Phillips Petroleum Co., Pure Oil Co., Shell Union Oil Corporation, Skelly Oil Co., Socony-Vacuum Oil Co., Standard Oil Co. of California, Standard Oil Co. of Indiana, Standard Oil Co. of Ohio, Standard Oil Co. of New Jersey, The Texas Co., Tide Water Associated Oil Co., and Union Oil Co. of California to the questionnaire which was sent out by the Department of Justice on November 10, 1938. These are photostatic copies of original letters which are in the files of the Department.

I think the committee, although this is bulky, may wish to consider the advisability of having it printed, since it is the only information which the committee has on the subject of the exchange of gasoline.

The CHAIRMAN. Is it your recommendation that it be printed?

Mr. Cox. We recommend that it be printed; yes, sir.

The CHAIRMAN. Without objection it will be so ordered.

(The letters referred to were marked "Exhibit No. 1321," and are included in the appendix on p. 9864.)

Mr. Cox. There is one additional item that I wish to call to the committee's attention. I was informed this morning that the civil court of appeals in Texas has reversed the decision of the lower court which confirmed the decision of the Railroad Commission refusing Mr. Dailey¹ a permit to drill on his plot in the Old Ocean field, and directed the lower court to issue a mandatory injunction to the Railway Commission directing the issuance of a permit. Since the record for the Railway Commission was introduced by Colonel Thompson² and there has been some discussion of that case here, I should like to reserve the right upon obtaining possession of a copy of the opinion of the court of civil appeals, to offer that opinion after it has been inspected by the committee.

¹ John B. Dailey whose testimony appears in Hearings, Part 14.

² Col. Ernest O. Thompson whose testimony appears in Hearings, Part 15.

The CHAIRMAN. Very well.

The Chair is in receipt of a letter from Mr. A. A. Stanbaugh, vice president of the Standard Oil Co. of Ohio, who asks permission to submit a certain statement in response to the testimony of George B. Ingram¹ before this committee. Without objection the letter and the enclosure will be printed in the record.

(The letter referred to was marked "Exhibit No. 1322," and is included in the appendix on p. 9926.)²

The CHAIRMAN. Mr. Farish, you may proceed.

TESTIMONY OF WILLIAM S. FARISH, PRESIDENT, STANDARD OIL CO. (NEW JERSEY), NEW YORK, N. Y.

Mr. FARISH. I presume, Senator, you want the usual identification of the witness.

The CHAIRMAN. I think it might be well.

Mr. FARISH. My name is William S. Farish. I have been in the oil business in some capacity for some 38 years starting with Spindle Top and carrying through as an operator of one kind and another in Texas, drilling contractor and producer, and so on, until 1917, at which time I merged my property interests with other producers, and formed the Humble Oil & Refining Co.

At the time of organization, I was vice president of the company. Two years later I was president of the company and remained president of the Humble Oil & Refining Co. until June 1933, at which time I resigned and was elected as chairman of the board of the Standard Oil Co. of New Jersey, serving in that capacity for some 4 years, and the last 2 years as president of the Standard Oil Co.

Practically all my business life has been devoted to the oil industry.

Mr. Chairman, I have filed, or I have distributed—it hasn't become a part of the record as yet—a printed statement attempting to sum up as well as I could the pertinent facts in connection with this investigation as I have interpreted it. It is not my purpose to read that prepared statement, unless it is desirable to pick it up in order, but I am hoping that you gentlemen have read it and that it will not be necessary to read it in detail in order to give you the opportunity to raise any questions relative thereto that you desire to ask.

I have prepared a brief memorandum from which I can talk as we go along that may serve the purpose better than to try to read the full paper. However, I am at your disposition in the matter.

The CHAIRMAN. It might be well for you, Mr. Farish, in accordance with the practice which has been followed by all of the witnesses, to summarize your statement if you are not going to read it all. That will be quite satisfactory.

Mr. FARISH. I think that will save time and I don't know that it would do any particular good to read the paper.

The CHAIRMAN. The formal statement will be printed in the record.

Mr. FARISH. Yes; I will offer that for the record.

(Mr. Farish's prepared statement was marked "Exhibit No. 1323" and is included in the appendix on p. 9930.)

¹ Mr. Ingram's testimony appears in Hearings, Part 16.

² An affidavit of the statement referred to, introduced on November 1, 1939, was marked "Exhibit No. 1354," and is printed in connection with "Exhibit No. 1322," appendix, p. 9929.

Mr. FARISH. First, I would like to assure the committee that the oil industry has taken this hearing very seriously. They have devoted a great deal of time and effort to analyzing their individual situations, answering the questionnaires, and to try to interpret as best they could the object of the committee and to make whatever contribution they were able to make. As far as we are concerned, we have made a serious effort to do that very thing, and in appearing here I want to assure you I am appearing without any brakes on, in an attempt to make whatever contribution it is possible for me to make to the enlightenment of the committee or to contributing any facts and knowledge that I may have of the oil industry.

The CHAIRMAN. I am sure the committee appreciates that Mr. Farish.

OBJECTIVES AND CONTRIBUTIONS OF THE INDUSTRY

Mr. FARISH. This industry has a long heritage of misunderstanding. As you all know, the old Standard Oil Co. was dissolved in 1911. My company accepted that development as an expression of public policy, and we have tried ever since to provide no foundation in fact for the suspicions which are still widely prevalent.

Ever since the committee announced these hearings on the oil industry, I have looked forward to them as the opportunity for the oil industry to tell the public about itself. I have hoped that a statement of policies and achievements would give the public a better understanding of the industry and its contribution to the general welfare.

At this point I offer for the record the formal statement which I prepared last week.¹ In preparing this statement, I have tried to discuss topics which have been of major interest to the committee. In the discussion of these various topics I have no intention to whitewash this industry. We've got human nature in the oil business just as well as in other industries and other walks of life. I am not going to tell you that no mistakes have been made in this business. Nor do I claim that there aren't bad spots and questionable practices here and there. I don't propose to try to offer a blanket justification of everything that has gone on in the oil industry; and likewise I don't want to claim for my own company that we haven't made mistakes. But I do say most emphatically that, bearing in mind the fundamental objectives of your inquiry, there is no condition in the oil industry which would justify any drastic overturn of established business relationships.

This inquiry of yours is concerned with broad problems of national welfare, as Senator O'Mahoney has repeatedly emphasized. You are seeking to clarify the workings of our economic system, to determine what are the obstacles that exist to the full employment of men and capital. You are especially concerned with the problems of making such adjustments to changing conditions as will enable private enterprise to offer the greatest employment and afford the greatest opportunities for investment of capital. Then you lay a set of social yardsticks on the petroleum industry, what do you find? You find good

¹ Admitted to the record as "Exhibit No. 1323."

products, improvement in products, low prices. You find progress over the years in the direction of still lower prices. You find that all this has been done with increased wages, with reduced hours of employment, with remarkable stability of employment, and with good labor relations. You find that it has been done without wasteful use of capital in refining, but as the same time on such an expanding scale and with such rapid technical progress that there has been constant opportunity for the investment of savings. In view of the rapid growth of the industry, it is surprising that the growing pains have not been sharper. It seems to me the weight of the evidence is that the social performance of the industry has been of the highest order. Impressive technological advances in all fields have conserved resources and effected huge cost savings. These savings have been shared with labor and the consumer. The industry's return on capital, as measured by that of the reporting companies, has been modest. Let me make it clear that the industry does not speak of its achievements in any spirit of complacency. We are our own severest critics. We are more proud of our progressive spirit than we are of our accomplishments.

These results came about through the efforts of individual companies to strengthen their own competitive situations. There is competition in the petroleum industry, and that competition has been in the public interest. Because of the very nature of the oil business an adventurous pioneering spirit has always been characteristic.

PRESERVATION OF FREE AND OPEN COMPETITION ADVOCATED

The CHAIRMAN. I take it, if I may interrupt you, Mr. Farish, from the manner in which you have made these two statements, that it is your belief that competition should be maintained and preserved?

Mr. FARISH. Yes, sir. I think I have made that very clear in the paper, sir.

The CHAIRMAN. And that whatever serves to promote the interest of the independent as well as of the larger companies is a desirable thing?

Mr. FARISH. Certainly.

The CHAIRMAN. And that whatever serves to retard the activity of any factor in the oil industry is a deleterious thing.

Mr. FARISH. If it is directed at any factor in the industry; yes. I believe in open, free competition. I don't think there is any measure of whether one man is a big man or a little man—in other words, I don't think you can dress competition up in different colors. It is all one color.

The CHAIRMAN. Of course, some suggestions have been made by some commentators upon industry as a whole. The suggestion has sometimes come from high places that there ought to be a limit upon the size of industrial units. Have you any opinion about that?

Mr. FARISH. Well, I have never been conscious of any necessity for limiting size. I think size in itself has sufficient handicap to protect the public from too great a size.

The CHAIRMAN. Do you think that the small one has any disadvantage competing with a large unit?

Mr. FARISH. Well, you get into details of definition there that I would have to ask—what do you mean by “disadvantage”? Obviously the man with \$10 can’t compete successfully with the man with a million dollars.

The CHAIRMAN. Let’s put it on the basis which has been so frequently repeated in this inquiry—the contrast between the integrated and the nonintegrated company. Of course, this is a condition which is characteristic of other industries than petroleum.

Mr. FARISH. Well, I don’t know just what you are driving at, Senator. If you think you can set up a system of economics in this country where a man with more capital—

The CHAIRMAN (interposing). I am not expressing any thought, I am not trying to express any thought, Mr. Farish.

Mr. FARISH. You are trying to put thoughts in my mind, then. Let’s see if we understand each other.

The CHAIRMAN. Not at all. I am merely asking you in terms of testimony that has been presented to this committee whether in your opinion the nonintegrated company is at a disadvantage in competing with the integrated company.

Mr. FARISH. Well, in some respects he is. I think I have covered that fully, Senator, in the paper,¹ and have tried to separate it side by side and argue the point, and if I may suggest, I think we would make a little better headway if you would let me read through with the brief, formal start here and then we can take up any phase of it that is desirable.

The CHAIRMAN. Very well.

Mr. FARISH. When a man found oil in one spot he had the urge to move on to some other spot and look for oil. You may call that a gambling spirit if you want to. But whatever you call it, it runs through the oil industry. It is the source of a progressive attitude, a continued striving for betterment and improvement, a constant lowering of costs in a search for competitive advantage. As we see it, our achievements and our progressive spirit are definitely the result of competition. We regard the industry’s record not as a personal tribute to oil corporation executives but as a fine example of the merits of the American system.

COSTS, PROFITS, ULTIMATE PRICES

Mr. FARISH. Executives in this industry have been forced through competition to direct their attention to the lowering of costs. The only way in which aggregate profits could be maintained was through the reduction of costs in order to keep them under prices. This cost-reduction program has required large investments in new processes of refining and has resulted in the rapid obsolescence of refinery equipment. It has been reflected in improved techniques in production; and many of the investments in transportation equipment in the marketing field, such as the transport truck, are the direct result of the pressure which competition places on costs. The spirit of this industry has developed an economic trend in the direction of lower costs and better service to customers which is now so strong that nobody can buck it successfully.

¹ “Exhibit No. 1323.”

Perhaps a personal incident will serve to illustrate the importance of this cost reduction. When our present sales manager was appointed, I told him that I was going to judge the effectiveness of the sales department's operations by the extent to which marketing costs were reduced. I am happy to state that on a per gallon basis the average cost of direct marketing for all products has declined from 3.09 cents in 1933 to 1.89 cents for the first 6 months of this year.

The VICE CHAIRMAN. Will you come back and make some explanations later on as to how you accomplished that? I don't mean to interrupt you.

Mr. FARISH. Yes, sir. Our company has been able to accept low realizations on its products and yet have a profit on its marketing operations.

Mr. HENDERSON. In 1933, according to information the Federal Trade Commission submitted, the Oil and Gas Journal gave the average service station price of gas as about 12.75 cents. In 1938 it was 13.9 and I understand your company increased its price in the last 2 weeks. How do you reconcile the two statements?

Mr. FARISH. What statement now?

Mr. HENDERSON. Your statement—

Mr. FARISH (interposing). You go back to '33 with the service station price and what was your next date?

Mr. HENDERSON. The average for '38 was 13.9 and I understand it is higher now by virtue of some increases that have taken place. And yet there has been a reduction, as you say, in the cost there—

Mr. FARISH (interposing). I beg your pardon. What I am referring to in these figures is the direct marketing cost which is the wholesale cost between the refinery and the filling station. It has nothing to do with the retail price, it has nothing to do with the cost of retailing.

Mr. HENDERSON. Well, but there is a relationship between the price at the tank wagon and the price at retail, is there not?

Mr. FARISH. A relation?

Mr. HENDERSON. Yes.

Mr. FARISH. Yes; there is this relation, when the tank-wagon price goes up or down, ordinarily the retail price goes up or down.

Mr. HENDERSON. That is what I would gather from these prices, that this reduction in the average cost of direct marketing has not been passed along. The consumer is paying higher prices now.

Mr. FARISH. I think if you look at the record it is very clear that it has been passed along. The oil industry, for instance, to put it this way, is accused by many people of operating their marketing departments at a loss. Many times they do. We do have losses. I don't know any business that always operates at a satisfactory profit. So that the margin of cost—that is a long story if you want to go into it now—

Mr. HENDERSON (interposing). No; but what I would like to get at is, if you have reduced your cost of marketing and the retail price of gasoline has gone up, does that mean that the retailer has a wider margin of your savings?

Mr. FARISH. In some respects the retailer has gotten a large margin.

Mr. HENDERSON. Yet the testimony progressively in the hearings has been that there has been a shrinkage in that margin between the tank wagon and the retailer.

Mr. FARISH. Over the years that is correct, but you are contrasting now 1938 and the present moment.

Mr. HENDERSON. I was contrasting the 2 years you selected for your comparison of the reduction in the cost of marketing.

Mr. FARISH. Well, during that time—well I think during the years—let me put it this way, Mr. Henderson. As I look back over the record of the petroleum industry there has been a constant reduction of costs. And the industry is proud of the fact that it has reduced costs. We have reduced refining costs tremendously. I can't give you the exact percentage, but something of the order of 40 or 50 percent. We have reduced transportation costs in all departments. We have reduced, as I pointed out here in this period of time, and I think this isn't only true of our company; this is generally true of the industry—I happen to have the figures of our company is the reason I quote them here—we have reduced marketing costs, and marketing costs in the large companies is the wholesaling cost of products, that is, between the refinery and the reseller or the consumer.

Now they have unquestionably come down from 30 to 40 percent. Refinery costs have come down of the order of 40 or 50 percent. Transportation costs have come down, and in most instances production costs have come down, and, of course, in this process all costs have come down, and obviously it doesn't take any prophet or any analysis to show these cost reductions have been passed on to the consumer, because here is an industry that is not making over 5 percent on its invested capital, and cost reductions alone have amounted to something much in excess.

Mr. HENDERSON. I am afraid that doesn't answer me. I am looking at this statement you have made here, which shows a reduction of 1.2 cents between the refinery and evidently your tank-wagon price. And yet in that same period, '33 to the present time, there has not been a decrease in the price—

Mr. FARISH (interposing). You are talking now about the price to the consumer. To understand that, are you taking into your own calculations all the factors that enter into the price to the consumer?

Mr. HENDERSON. I wasn't making a calculation. I am just—

Mr. FARISH (interposing). You must take into consideration all of the factors that enter into the price to the consumer. You are forgetting, I take it—

Mr. HENDERSON (interposing). I am not forgetting anything, Mr. Farish. I am trying to learn something, not to forget something.

Mr. FARISH. I am trying to tell you.

Mr. HENDERSON. Don't make it appear that I am forgetting. I am just asking you the simple question, how would you explain the fact that that very substantial reduction, on which I think you ought to be congratulated, does not reflect itself in the price to the consumer? Evidently you want to tell me that some other costs have gone up.

Mr. FARISH. I don't want to tell you anything but the facts, Mr. Henderson. I haven't before me the exact facts under which those retail prices rested at that time, but my guess would be first that the

price of crude was much less in '33 than it is at this time, maybe to the extent of $1\frac{1}{2}$ or 2 cents a gallon reflected in gasoline. Second, that pipe-line transportation and boat transportation rates at that time were higher than they are today. Third, that the cost of marketing in '33 was higher than it is today. That would be my guess.

Mr. HENDERSON. If that is your guess, then the price ought to be lower. If those costs were higher in '33 than they are now and you have made a substantial saving in your marketing costs and if transportation costs are lower today, then the price ought to be lower.

Mr. FARISH. All of those things can probably be offset, Mr. Henderson, in the difference in the cost of crude at that time. I will be glad to work out a calculation for you on that, if you are seriously interested, because I don't think anybody can read the record of the petroleum industry and deny the fact that costs have come down over the years, and are still coming down.

The CHAIRMAN. Perhaps it might be of interest to the committee if we should take advantage of the suggestion that you have now made, and ask you at your convenience to prepare a comparison of all of the factors which enter into the cost to the consumer as between 1933 and the first 6 months of this year, a period during which, as you testify, the cost of direct marketing was reduced from 3.09 cents per gallon to 1.89 cents.

Mr. FARISH. I will be glad to, sir.¹

Dr. LUBIN. May I ask you a question in that same connection? You mentioned the fact that the industry has earned an average of about 5 percent, that that in itself is evidence of the fact that these savings have been passed on. As a matter of fact, $5\frac{1}{2}$ percent average for an industry may mean that one firm may make 100 percent and everybody else may be losing money, may it not?

Mr. FARISH. No, sir; I don't think that is a fair assumption.

Dr. LUBIN. You can get a 5.5-percent earning on that basis.

Mr. FARISH. I don't think that is a fair assumption. I can't conceive of a situation where one can make money and all the rest of them lose.

Dr. LUBIN. Let's assume a dozen made 100 percent and the others all lost money, and the net return is 5.5 percent, the average.

Mr. FARISH. If you want to let your imagination run that far I agree with you.

Dr. LUBIN. Your stockholders wouldn't be satisfied if you showed losses every year yet said "This is a swell industry; the average profit for the industry is 5.5 percent." Is the 5.5-percent figure of any importance in discussing the profits of the industry, or what the public is getting from the industry?

Mr. FARISH. I think it is, because I am quite sure that the average earnings of the oil companies in the industry are quite similar. I am talking now of the major companies, those companies who are listed on the stock exchange. There is, if you will pardon me, some difference in swings of earnings as between producers and marketers and refiners.

Dr. LUBIN. A statement has been made time and again, for example, that the retail business in the United States is a losing busi-

¹ Mr. Farish read into the record the following day his explanation in response to Mr. Henderson's questions on this point. See p. 9736 et seq., infra.

ness, that if you took all of the investment over a period of years the net is a loss not a gain, and yet a lot of people make money in retailing.

Mr. FARISH. I don't think the first statement is true.

Dr. LUBIN. It is pretty generally believed.

Mr. FARISH. I don't know any more than you do, but if the first statement were true there would be more mortalities and there would be more people getting out of the business.

Dr. LUBIN. The mortalities run 90 percent over a period of 20 years. That is pretty high.

Mr. FARISH. I would challenge that. I don't know anything about it, but I would challenge any such figure.

Senator KING. You are talking about all the little shops——

Dr. LUBIN (interposing). Those little shops' losses are losses to the industry. You take that investment into the picture when you talk about the total.

Mr. FARISH. You may find fairly high mortality with individuals running some of these stations and so on.

Dr. LUBIN. I am not talking about mortality in the oil and gas business; I am talking about retail trade as a whole.

Mr. FARISH. I beg your pardon; I thought you were talking about the oil business.

My point is simply this. I am glad you mentioned that. The mortality in the oil industry in any phase of it is nothing comparable with what it is in general industry, nothing comparable. Unfortunately, I haven't made a study and we haven't the facts on it, but they are available to this committee. You can study it, you can get the facts, and I will venture the assertion that the mortality in any phase of the oil industry doesn't compare even to 25 percent of what it does in general industry.

Senator KING. I suggest, Mr. Chairman, that we hear the statement of Mr. Farish, because there are many questions that may be cleared up by this statement; and then when he gets through we can address ourselves by examination and cross-examination to the statement which he has submitted.

The CHAIRMAN. The Chair believes the suggestion of Senator King is well worth following. It has been the plan which this committee has on numerous occasions announced it would follow and always abandoned.

Mr. FARISH. I am entirely at your disposal.

The CHAIRMAN. The chairman recognizes that, but in the interest of the orderly presentation perhaps it would be well to allow the witness to make his statement, and then the Chair will recognize each member of the committee to ask as many questions as each member desires.

Mr. FARISH. All right, sir.

Our company has been able to accept low realizations on its products and yet have a profit on its marketing operations. This trend of cost reduction has been general in the industry. Anyone who hasn't recognized this trend toward cost reduction and improvement in efficiency and adjusted his operations to it has a difficult time in the oil industry.

By the very nature of my assignment as the concluding witness for this industry I naturally was unable to prepare my testimony until the hearings were nearly finished. Consequently my written state-

ment¹ was prepared only last week. I presume, therefore, that many of you have not had the opportunity to give it the careful attention which I hope it merits. If you will look at this prepared statement you will see that it has several main parts, as follows: Concentration of economic control, complaints of unfair competition, integration, and problems of crude-oil prices and conservation.

What I have given you, gentlemen, is only a preliminary statement. I have here a summary of what is in the prepared statement. I will take it up in detail if you like, or I am perfectly willing to submit myself to your questions.

The CHAIRMAN. Suppose you take it up in detail, Mr. Farish. I think it will be advantageous to members of the committee who may not have had the opportunity of reading your prepared statement.

Mr. FARISH. I will try to bring out the high lights of this, and you may then open up the subject in the way that you like.

BENEFITS TO THE PUBLIC CLAIMED BY THE INDUSTRY

Mr. FARISH. The statements made before this committee and accepted without challenge may be stated briefly as follows:

1. The petroleum industry provides the public with a wide variety of good products.

2. The quality of the products and the services involved in their sale have improved markedly over the years.

3. The products of the industry are low in price.

4. Over the years prices have declined substantially.

5. The industry has offered steady employment at good wages. Witnesses have demonstrated that the oil industry pays high wages; that its employees enjoy high annual earnings; that hours of labor have been notably decreased; that there is little seasonal variation in employment; that the turn-over of employees is low; that cyclical variations in employment have been small; that the safety record of the industry is excellent; and that its labor-relations record is outstanding.

6. The industry has offered opportunities for the investment of savings and has attracted capital with a modest return to that capital. The statistics published by the T. N. E. C. show that the capital employed by the "major" oil companies alone rose from five to eight billion dollars between 1924 and 1938 and that the rate of return averaged 5.6 percent on the book value of the common stock over the same period.

7. The industry has been quick to abandon obsolete methods and equipment.

I list those subjects I think as not debatable. At least they have not been debated or questioned before this committee.

The industry does not claim that these desirable results came about because of altruism on the part of the executives and owners of individual concerns in the industry. Far from it. The industry will readily concede that most of these results came about through the efforts of the individual companies to strengthen their own positions. In essence, the statements mean that there is competition in the petroleum industry, and that competition in the petroleum industry has been in the public interest.

¹ "Exhibit No., 1323," appendix, p. 9930.

Some of this is a slight repetition, gentlemen, of what I have summarized but it will bring out the problem, I think.

No one in the industry furthermore would undertake to deny that the industry has had the benefit of many favorable circumstances.

We admit that fully. It should be emphasized what managerial skill has been required to accomplish the desirable results. For example, the reduction of the cost of gasoline to the consumer has not been obtained by reducing wages; wages have been advanced and hours have been reduced at the same time prices have declined.

It is wholly proper that such claims to beneficial public results should be scrutinized carefully by this committee. The industry believes that the more carefully the committee examines the evidence presented in these hearings in support of the claims, the more convinced its members will be of their validity. Since the objectives of this inquiry as repeatedly emphasized by the chairman of the committee have been to determine whether any obstacles exist to the full employment of men and capital, the unchallenged results just listed are immensely pertinent. Judgment as to whether the petroleum industry is free from such obstacles must rest in the last analysis on an appraisal of the results of competition as it exists in the industry.

QUESTION OF CONCENTRATION OF CONTROL

MR. FARISH. Through these hearings much interest has been expressed in the extent to which the control of the industry is concentrated in a few hands. A complementary question is that of the extent to which opportunities are open to small-business men and small business enterprises in the industry.

It must be conceded at once that there are some very large companies in the petroleum industry and that taken together these large companies do a substantial proportion of the business. At the beginning of these hearings figures were introduced to show the proportion of the business done by a selected list of companies at the several stages of the industry. Although there may be some reservations as to the accuracy of particular figures, the general picture of a substantial proportion of the industry's business being conducted by large concerns is not challenged. These facts have long been known.

What is important is the interpretation put upon those facts. If the committee had their minds made up in advance that the mere presence of large concerns in the industry is in itself evil, it is obvious that there was no point in holding these hearings. I am sure we can all agree, therefore, that the fact that there are a number of large companies which do a substantial share of the petroleum business is merely the starting point. The real purpose of this inquiry, then, must have been to examine the way in which competition works in an industry in which large business units and small business units exist side by side, and to appraise the results of that competition in terms of consumer benefits, in terms of the employment of men and capital, in terms of the opportunities open to small firms as well as to large firms.

That there was once a very high degree of concentration in the petroleum industry is well known. In the days of the old Standard Oil Co. more than 80 percent of the business was done by a single

concern. Following the dissolution of that company, there has been in all divisions of the industry an increasing number of competitors. Over the years since 1911 the proportion of business done by the companies succeeding the old Standard Oil Co. has been very greatly reduced. The industry believes that overwhelming evidence has been presented at this hearing to the effect that competition in all its forms is all-pervasive and intense.

Much confusion has been evident in these hearings in regard to the question of concentration of economic control. One of the sources of the confusion appears to be in differing definitions as to what is meant by concentration of economic control. One type of concentration of economic control is that of ownership—and it is clear that ownership of oil enterprises has increasingly been diffused among large numbers of people.

A second type of economic control which has been mentioned in these hearings is the tendency for stockholders to leave power in the hands of corporate managers. Much is made of the fact that few stockholders appear at corporate meetings or take an active part in supervising the managements of their companies. These facts are true, but they are equally true of practically all corporate business. Any implication that, because stockholders sign proxies rather than attend meetings, corporate managers in the oil industry are free to manage without regard to the interests of stockholders is most emphatically not true.

The third type of concentration of economic control to which reference has been made is the extent to which ownership of facilities in particular branches of the industry is in the hands of some particular number of companies. Here almost anything can be shown depending on the number of companies selected. Why should the number be 20? In the automobile business, which is admitted to be highly competitive, 3 companies control a higher percentage of business than do 20 companies in the oil industry. Questions as to the bearing of this kind of economic control on competition cannot be answered statistically. It is much more pertinent to examine directly the extent of the competition among the large companies and to look directly at the opportunities for small-business men in the industry.

The extent and intensity of the competition among large oil companies has been amply developed by the testimony which you have heard. I shall therefore not undertake to repeat that testimony; but I do wish to examine in some detail the opportunities for small-business men in the industry.

A definition of certain terms is necessary before this question can be discussed intelligently. The word "independent" was formerly applied to all companies not associated with the old Standard Oil group. More recently some of these independents, such as the Texas Co., Gulf Oil Corporation, Pure Oil Co., and others, have been grouped with the Standard Oil companies under the term "majors." Now, apparently everyone outside the list of majors is called independent. The analysts of the T. N. E. C., for instance, in tables prepared for the hearing, regularly listed 18 or 20 companies as majors, and it is concluded that they place these firms in one general category and all others in another category labeled "independent."

Parenthetically, it is worth observing that this classification places among the independents a number of the companies which were formerly in the old Standard Oil group. These definitions mean, of course, that the independents include firms of many different sizes. In the producing branch of the industry, for instance, such large independent companies as the Amerada Corporation, the Seaboard Oil, the Superior Oil, the Barnsdall, the Benedum and Trees interests, and Harrison and Abercrombie are at one extreme, and individuals with an interest in a single well are at the other extreme. In transportation, independent enterprises range in size from an individual owning a single truck to large steamship companies owning and operating tankers for charter. In refining, the range is from small skimming plants requiring investments of a few thousand dollars to concerns operating cracking plants which cost several million dollars. In marketing, the size of independent operation varies from the single-station unit to the marketer with a substantial position in particular territories, as, for instance, the Jenney Manufacturing Co. in New England, or the Spur Distributing Co. operating throughout the South. In the immediately following sections of this paper attention will be directed to the prospects for both small- and large-scale independent businessmen in producing, refining, transportation, and marketing.

I pause, Mr. Chairman, in the interest of orderly procedure; if there are any questions to be directed to the question of economic control, it seems now is the opportune time to do it.

The CHAIRMAN. Do any members of the committee desire to question Mr. Farish at this point?

May I say, Mr. Farish, referring to your statement on page 3, at the bottom of the page:¹

The analysts of the T. N. E. C., for instance, in tables prepared for the hearing, regularly listed eighteen or twenty companies as majors, and it is concluded that they place these firms in one general category and all others in another category labelled "independent."

I merely wish to point out that was a conclusion of the witness probably not altogether supported by the attitude of the committee. For my own part—

Mr. FARISH (interposing). It is not important, Mr. Chairman. I am only trying to get an understanding of definition of terms.

The CHAIRMAN. Certainly; but I want to make it clear that the distinction in my own mind is that between the so-called integrated company and the so-called nonintegrated companies. To what extent, if at all, the integrated companies may exercise control over the whole industry by means of leadership, or by other devices, is another question, but I merely wanted to point out that this committee has not itself drawn any conclusion from these tables.

You were going to make some remark?

Mr. FARISH. I was just going to say, since you brought that up, when you talk about integrated companies, the record perhaps, as written, would give one the impression that the number of integrated companies in this industry is relatively small. As a matter of fact, in my judgment, the number of integrated companies in this industry

¹ Mr Farish read from a previously prepared memorandum, copies of which were distributed to those present at the hearing.

would perhaps run into something of the order of 200, not wholly integrated, perhaps, but integrated in part in their operations, with the instinctive desire and ambition on the part of each one of them to become wholly integrated if possible.

ABILITY AND INTEGRITY OF CORPORATE MANAGEMENT

The CHAIRMAN. I am very much interested in your analysis of the situation within the large companies. You state, for example, that the tendency of stockholders is to leave power in the hands of the corporate managers to be found in the petroleum industry, and that it is characteristic of all business, particularly of large business.

Mr. FARISH. I think that is a present trend.

The CHAIRMAN. Then you say that any implication that because stockholders sign proxies rather than attend meetings, corporate managers in the oil industry are free to manage without regard to the interests of stockholders is most emphatically not true. Now that is a very interesting statement.

Mr. FARISH. And I think a very true statement.

The CHAIRMAN. I would like to develop it. There have been many examples where, because of the lack of cohesion, may I say, between the large number of stockholders and the management, management has been able to do practically what it liked. To take an extreme example, and not with any implication at all that it applies to any company that has appeared at this study, I cite the famous case of McKesson & Robbins. There was a large diffusion of stock interest. Ownership was separated from control, and control did what it pleased. Now that opportunity is present, is it not, under the conditions which you described as characteristic of all large business?

Mr. FARISH. Yes, sir; and that opportunity is present and possible in any walk of life. You have no more guaranty that a corporate president, a director, is going to be 100 percent honest and pure than you have that a preacher is going to be, or a Congressman, or anybody else in any walk of life. I think that is a risk of human nature that is inherent to life.

The CHAIRMAN. Is it a risk which need be entertained so far as a large artificial organization is concerned? We can't very well avoid it in the personal relation.

Mr. FARISH. Senator, I sense your approach to the subject, but after all, is there any way anybody can guarantee honesty and integrity?

The CHAIRMAN. I don't think there is any way of guaranteeing honesty and integrity, no; but certainly there is a way of limiting the opportunities for dishonesty and lack of integrity.

Mr. FARISH. My theory is that the crook, if you will, has a poorer chance to keep his head up and swim in a large organization than he has in almost any other walk of life. If I may go on just a minute on that point, my observation and my experience is, the existence of a large organization, within itself even, for effective continuity of operation and management, is absolutely dependent on the exaction of the highest possible standards of conduct all down the line; and it is inconceivable to me that in an organization such as I am familiar with, a crook can last any length of time in any job in that organization.

The CHAIRMAN. I can readily conceive that to be true.

Mr. FARISH. Now, we do have a few defalcations, we have a few people that are not different, and we don't employ people different from anybody else, and there are some slips; some people go wrong; but my contention is, and my philosophy is, that in a properly run large organization and most large organizations are properly run, whether in the oil industry or any other industry—the opportunities for a crook to keep his head above water are less than they are in any other walks of life. He has more checks on him; he has more observers; he is just put to a harder task.

The CHAIRMAN. I would like to have you in a little greater detail explain just what you mean when you say that corporate managers in the oil industry are not free—I am changing the sentence by making it in the negative instead of the positive—to manage without regard to the interests of stockholders. Now, here you have—

Mr. FARISH (interposing). May I ask this: They are not free to do it? Why? That is your question.

The CHAIRMAN. Yes; you have made this specific statement.

Mr. FARISH. I will try to give you an offhand explanation of it. If there is any standard that corporate management sets for itself—and most corporate management is somewhat in the nature of professional management today; in other words, people that I know at the head of corporations are not job holders in the sense of earning a salary, and they are not working for themselves in the sense of running their own business. They are men who have evolved, if you will, through the grind and process of evolution in that industry to the point where finally, by the common consent of their group as expressed by the will of the board of directors, they are elevated to the position of a director and then to the position of manager or head of the corporation.

Now, then, a man who goes through that grind has got to be a man whom, first, the organization has absolute confidence in; and confidence in him to do what? To run the business in the interests of the stockholders as well as the employees, and in modern days there is a third panel in that picture. He has got to run it in the interests of the public.

The CHAIRMAN. Now that depends all upon the moral character, the honesty, and integrity of the men who are in these great establishments, does it not?

Mr. FARISH. Largely; I would say the moral character of the group, certainly.

The CHAIRMAN. And let me say for myself, and I think for the great majority of persons who are in government, the existence of a very high standard of honesty and integrity among the leaders of business is recognized and there is no implication of any charge to the contrary in anything that I say here, or any question that I direct to you, but I now submit this inquiry: If it be true that the protection of the investor, the protection of the stockholder, and the protection of the worker is dependent solely upon the character of those who happen for the time to be directing these enterprises, do you think that the full obligation of government toward these organizations has been met? You see what I am driving at.

Mr. FARISH. I get what you are driving at but I don't accept your statement, I don't accept your premise. I don't think for a minute that it depends solely.

The CHAIRMAN. That was your answer to my question. That is the reason I stated it that way.

Mr. FARISH. I said it is dependent to a large extent. I don't for a minute say that a real crook can't find some way to be crooked, but let me put it this way: The management of corporations is not dependent solely on the integrity of individuals.

The CHAIRMAN. Let's put it in your phrase, "to a large extent."

Mr. FARISH. There are a thousand checks on all management today.

The CHAIRMAN. What are those checks?

Mr. FARISH. They are the checks of—they run all the way through the business.

The CHAIRMAN. But they are the checks that are imposed by business upon itself.

Mr. FARISH. Partly, and they are largely imposed by government.

There is no transaction that is not open to investigation on the stock exchange, by the S. E. C., within a corporate management. You speak of the stockholders' meetings. True, the stockholder doesn't attend, and by the way, I would like to say, as a matter of comment, I think that it is the highest tribute that could be paid to corporate management. Stockholders don't go there and worry about it; they have confidence in the management. They say, "Go to it, brothers; we'll leave it to you."

The CHAIRMAN. That may feasibly be so, but——

Mr. FARISH (interposing). I have gotten to this point in that connection, that we have tried in our own organization to stimulate a little interest in stockholders' meetings. We have a free luncheon, we have free transportation, and last year we had some 200 people there, which is quite a remarkable thing.

Mr. O'CONNELL. How many stockholders have you?

Mr. FARISH. One hundred and thirty thousand.

The CHAIRMAN. How many of those own less than 100 shares each?

Mr. FARISH. The average ownership is 200, I think, Senator. How many own less than a hundred each I would have to look at the records to say.

The CHAIRMAN. My recollection, from a statement that was made a year ago, was about 96,000. I was told.

Mr. FARISH. A considerable amount.

The CHAIRMAN. You speak about the lack of attendance at stockholders' meetings, and I am willing to acknowledge that that in itself may be regarded as a tribute to management. How about attendance at directors' meetings?

Mr. FARISH. That I can't answer except for my own company. We are a holding company and we have 10 board members, two of which are inactive. We have 8 members of the board, and it is a working board and everyone of them is there every day, and every one of them has a definite, particular job. We operate as an executive committee of 4, a permanent executive committee of 4, filled in by various other members of the board who total 5. We meet every morning at 11 o'clock every working day.

Dr. LUBIN. These directors are in a sense officials of the company in the sense that they are on the pay roll of the company?

Mr. FARISH. I didn't quite get that.

Dr. LUBIN. Are all of the directors on the pay roll of the company?

Mr. FARISH. Oh, yes; they are all active workers in the company.

The CHAIRMAN. Is that characteristic of other large companies?

Mr. FARISH. Senator, I haven't made an examination.

The CHAIRMAN. Well, you are more or less familiar with it.

Mr. FARISH. I think it is of some, and I think it is quite general in the oil industry.

The CHAIRMAN. But would you say it was general in business, in all industries?

Mr. FARISH. I have made it a point in my life never to serve as a bank director or as a director in any other corporation.

The CHAIRMAN. So that you can't testify of knowledge?

Mr. FARISH. No, sir. I mean any other corporation.

Senator KING. I suppose those who are directors, managers of your organization, the 8 or 10 to whom you have just referred, give all their time.

Mr. FARISH. Yes, sir. They are career men, they have grown up in the business; some have been stenographers, some drillers, still-men, or what not.

Mr. HENDERSON. Mr. Farish, awhile back you said there is not an action which is not reviewable by the stock exchange or the S. E. C. I think you made a little bit of an overstatement—

Mr. FARISH. Probably.

Mr. HENDERSON. Because of the powers that are involved. Also, I think you are concentrating tests of management on honesty and purity, whereas the main questions of management are, as the chairman so ably pointed out, not questions of their character. As I see it, they are the tests of managerial ability, and certainly the S. E. C. and the stock exchange have no authority to review the operations of any particular managerial group. Would you not agree with me that so far as the managerial activities are reviewable by the general stockholders, it is almost an impossible task?

Mr. FARISH. By the stockholders? I think I have either given you the wrong impression or you have gotten the wrong impression. I admit my statement of checks by the stock exchange and the S. E. C. was perhaps an overstatement, but I thought I made it quite clear that, in my judgment, today no man in the normal course of things gets to be an official of one of our major corporations unless he has demonstrated this managerial ability of which you speak. I think that goes with it. He has also had to demonstrate character and integrity.

Mr. HENDERSON. Whom has he demonstrated—

Mr. FARISH (interposing). Pardon me just a second. To go on to your other point, to what extent stockholders can check that today, I don't know. I think we are in a hazy ground there. I can't say in all frankness that stockholders can check that thing and measure results, and I think it is pretty clear to any students of business that many companies have poor management, and when a company has poor management and when management is falling down we see over the times managements change; people grow old on the job, and they cease to grow with the industry and with the company and they are weeded out; there is a constant change going on in that respect, but frankly, I doubt whether the stockholder, the average stockholder, today exercises any real influence over that change. I think that change comes primarily from within.

Mr. HENDERSON. And coming from within may not necessarily represent a group that has the majority of the stockholdings. Is that not true?

Mr. FARISH. I think anything is possible there. As far as I know, my own judgment is that certainly it is in our shop, our directors are entirely unconscious of who own the stock. It doesn't make any difference to them who owns the stock.

Mr. HENDERSON. You mean in the solicitation of proxies—

Mr. FARISH. When you talk about majority stock owners you may talk about some group who wants control of the operation, and some don't, but thank God we are free of that.

The VICE CHAIRMAN. May I ask you a few questions? Mr. Farish, you speak basically on the question of concentration of economic control, as I understand you.

Mr. FARISH. Yes, sir.

The VICE CHAIRMAN. And the effect of the statement impresses me, and I think it is correct that, insofar as economic control on the part of stockholders in your corporation and other major corporations, it is very small. As a matter of fact, I assume it will be agreed that the individual stockholder, even the stockholder with a considerable block of stock, couldn't oust any of the management in an organization that is functioning along and doing pretty well.

Mr. FARISH. I think that is correct, but I don't like to let it rest with just that brief statement.

The VICE CHAIRMAN. We have had a good many investigations here of insurance people,¹ and I believe the average member of this committee came to the conclusion that the distributed stockholder or policy holder had very little to do with the management or can have very little to do either with the management of the concern or with putting somebody else into managerial responsibility whom he favors.

Mr. FARISH. I think, as a simple statement of fact, that is correct; but let me put it this way—and I have given no thought to this subject, but if I were a large stockholder—you speak now of a large stockholder—

The VICE CHAIRMAN (interposing). Well, a large stockholder, a small stockholder.

Mr. FARISH. Well, a stockholder who is able to devote some time to it and spend a little money.

The VICE CHAIRMAN. Yes; there are very few of those.

Mr. FARISH. I don't know; I think there are quite considerable in most of our corporations. If it isn't true of one it is certainly true of two or three, and if he thinks something is so wrong with the corporation that action should be taken, to my mind it is a question of natural, logical development that others would think the same way, and the stockholder is not helpless in the sense that you picture him. If he is willing to fight, if he is willing to go to directors' meetings and point out the doubts and make the argument and make the fight, I think management could be overturned and any real changes necessary could be effected.

The VICE CHAIRMAN. Let me ask you this question, Mr. Farish. In the experience of your organization, or any other organization

¹ Testimony on the insurance business is included in Hearings, Parts 4, 10, 12, 13, and 28.

that you know, has management been ousted except by another group that merely wants the power of management and control in big organizations?

Mr. FARISH. Except another group that wants power and control?

The VICE CHAIRMAN. Yes; except in those cases.

Mr. FARISH. Why, yes; I think so.

The VICE CHAIRMAN. Would you like to name them? If not, I won't press you on that point.

Mr. FARISH. I think the management of the Standard Oil of Indiana was changed.

The VICE CHAIRMAN. Who did that?

Mr. FARISH. By the major effort of one stockholder.

The VICE CHAIRMAN. Who was he?

Mr. FARISH. Mr. John D. Rockefeller.

The CHAIRMAN. How long did it take him to do that?

The VICE CHAIRMAN. It took him a pretty good while and he really was quite a power in that company, wasn't he?

Mr. FARISH. Yes; he was a large stockholder.

The VICE CHAIRMAN. I am talking about the fellow who lives out at the forks and the creek and the little town. I won't press it. There is no use of his going to a stockholders' meeting. He gets up there and the best he could do probably would be that some of you folks would take him out to lunch, he would go to the show, and go home and tell his wife he had been to town. I mean that is just about all that could happen.

Mr. FARISH. Well, he wouldn't be very seriously affected, Mr. Sumners, if he could be bought off that cheap.

The VICE CHAIRMAN. He wouldn't be bought off, he just doesn't have anything to sell. I won't press it.

Mr. FARISH. Gentlemen, I am not trying to make a point of that. You are getting me all off the line of my comments. I am not trying to say that any stockholder can change the management of the company; of course, it is ridiculous, but I am here to say that any management of any company that is inherently wrong will change in time and will change probably from within.

The VICE CHAIRMAN. He will either break down or somebody who is within will get him out.

Mr. FARISH. Yes, sir.

The VICE CHAIRMAN. That gives us a picture. Practically speaking, the concentration of the financial power and resources of that organization from the managerial and administrative standpoint, is centered in the persons who are in the offices whose position comes through the process of time.

Mr. FARISH. That is right.

The VICE CHAIRMAN. That is about the picture.

Mr. FARISH. How else would you have it?

The VICE CHAIRMAN. That is it.

Mr. FARISH. How else could you have it and have efficient management?

The VICE CHAIRMAN. Really, I suppose you couldn't.

Mr. FARISH. May I make just a point there, Mr. Sumners? I don't want to make a speech about it, but you are pressing on the point.

The VICE CHAIRMAN. May I interrupt just a moment to say that that is one of the important points, I think, that the country and

this committee are concerned about. Everybody knows you have made progress in manufacturing oil and producing a lot of things, and all that, but the basic thing is, how important, especially in a Government of our sort, is this general trend of economic control? Then, of course, the next question—you have to meet it some time, we have all got to meet it some time—as I see it, is what chance has the small man? Put it this way: How big does an organization have to become until it can become a real competitor of organizations of your sort? That is in the picture, too.

Mr. FARISH. Well, I will proceed to go on and discuss that to some extent, but I think the smallest possible competitor can get into the game.

The VICE CHAIRMAN. Tell us about it.

Mr. FARISH. Well, may I go on? You have left me in the air on the other subject just a little bit. I want to make one more comment with regard to corporate management.

The VICE CHAIRMAN. Yes.

Mr. FARISH. The average corporate set-up, as I visualize it, is founded fundamentally on a good bit of the same basis that your governmental set-up is. We have got voters, you have got voters. We have a board of directors—

The CHAIRMAN (interposing). But we can't get proxies, Mr. Farish.

Mr. FARISH. Oh, yes; you do. I beg your pardon; that is a pretty active game.

We have a board of directors and we have an executive committee which might be Congress and the Senate, and we have a president. And change is taking place all the time.

Now, the point I want to get back to, for a minute: There seems to be more or less a prevalent idea in the public mind—put it this way; in the minds of some of you gentlemen—that this question of corporate management, this question of a job of managing or running a corporation or being one of the few who manage a corporation, is just holding a job.

The CHAIRMAN. We don't think that.

Mr. FARISH. I want to assure you gentlemen—

The VICE CHAIRMAN (interposing). Don't argue on that point. I don't think anybody thinks that.

Mr. FARISH. So far as my knowledge of this thing goes, and so far as I have been able to know and understand the men who are really running the corporations of this country, they have a job that you couldn't hire a man to do.

The CHAIRMAN. As Representative Sumners has said, Mr. Farish, you are arguing a point which doesn't exist.

Mr. FARISH. I understand that—

The CHAIRMAN (interposing). Neither the chairman of the committee nor the vice chairman of the committee, and no member of the committee, states that you are holding a job as a job.

Mr. FARISH. I would like to put this in the record, if I may.

The CHAIRMAN. Let it go into the record as you may, certainly, without any hindrance on my part. I want it to be clearly understood that so far as the chairman is concerned, you are putting up a straw man and knocking him down.

Mr. FARISH. Even so, I like this straw man.

So far as I have been able to measure and interpret the men running our large corporations today, and those I am familiar with, they are not just jobholders and salary takers. They are men who have devoted their lives in most instances to developing and perfecting their own peculiar abilities to do the very thing that they are doing now. It is the result of a life work, if you will, of service and intensely hard work to the final point where they are equipped to do a job that they are doing.

Now, the reward for those men—what I am trying to get over to you gentlemen—in the main is not money, it is not the job they do or the salary they get for that job. It is their life's ambition. It is the cumulative wave on top of wave of success, of accomplishment, of perfecting himself to do a better job, and through that evolution we get our tops in the corporate set-up in America today.

The CHAIRMAN. Now you are speaking of all corporate set-ups?

Mr. FARISH. I am speaking of the general proposition; yes, sir.

The VICE CHAIRMAN. May I ask this question, Mr. Farish: Is that ambition that you speak of prevalent in the managerial positions, to get bigger and bigger and control more and more business?

Mr. FARISH. I think as part of that, ambition necessarily goes with the doing a successful job.

The VICE CHAIRMAN. And getting more and more business and getting bigger and bigger is part of the notion of success?

Mr. FARISH. Probably that is involved.

The VICE CHAIRMAN. Do you think that ought to be curbed at any time, anywhere?

Mr. FARISH. Ought to be curbed? No, sir; I do not. I think they either kill off each other or they die through lack of efficiency. I think the public is served, to put it another way, by that effort.

The VICE CHAIRMAN. You spoke of a very interesting thing a moment ago. You made some reference to government, to concentration of power in moving up, up, up in government. I guess I won't ask anything about that.

Mr. FARISH. I don't get that reference, Mr. Sumners.

The VICE CHAIRMAN. You made some reference yourself a while ago to what is happening in government.

Mr. FARISH. I beg your pardon; I simply drew a parallel between the normal corporate set-up and the normal Government set-up.

The VICE CHAIRMAN. That's it. We don't misunderstand each other at all. And the normal corporate set-up seems to be that the bigger the corporation grows, the less managerial responsibility the owners of the corporation, representing the stockholders, can exercise.

Mr. FARISH. I don't think that is true.

The CHAIRMAN. Do you think the average stockholder of a corporation as big as yours can have as much relative influence as can the owners of a station that sells oil?

Mr. FARISH. Oh, no; I wouldn't say that. You are making the spread a little too long.

The VICE CHAIRMAN. That is emphasizing it to get the ends of the thing.

Mr. FARISH. I get that, so I have to say "No."

The VICE CHAIRMAN. I think that is the correct answer.

Senator KING. Perhaps the stockholders of a corporation are somewhat like the voters down in the district of the distinguished vice

chairman of this committee. They are so satisfied with him that he doesn't need to worry. Many of them never go to the polls. They say, "Judge Sumners is the right man in the right place," and they will send him here as long as he lives, if he lives to be a hundred.

Mr. FARISH. I think that is correct, sir. I subscribe to that belief myself, having lived in Texas thirty-odd years.

The VICE CHAIRMAN. I think we can drop that.

Senator KING. Let me supplement it by stating that in one State, and there are many others, several years ago—a large State—less than 18 percent of the voters, those entitled to vote, actually did vote, yet it was alleged that the machines that ran both political parties were so bad or so good that the majority of people never went near the polls.

Mr. FARISH. Senator, I sometimes think that is a defect in the American character.

Senator KING. I agree with you. We are too prone to let somebody else do it.

The CHAIRMAN. Now your comment which has provoked this discussion was, as I recall, that most management, most corporate management, is motivated by the professional desire to do a good job in the business in which it is situated. Is that—

Mr. FARISH (interposing). I think that is the idea; yes.

The CHAIRMAN. Now, of course, perhaps you can't speak with information with respect to other industries.

Mr. FARISH. No, sir.

The CHAIRMAN. But when you made that statement you were speaking of all industry and all corporate management.

Mr. FARISH. Yes, sir.

The CHAIRMAN. Have you been familiar with statistical statements which have been made from time to time, some of which were made before this committee only last Friday, to the effect that corporate managers have, in times of depression, increased their own salaries and their own rewards while the returns to the common-stock holders were falling off?

Mr. FARISH. No, sir; I haven't studied that to the point where I am familiar with it.

The CHAIRMAN. Are you familiar with the practice which has been followed in some companies, at least, of paying large bonuses to the management?

Mr. FARISH. Yes; that is public information.

The CHAIRMAN. Then those particular members of management were not totally oblivious of the return which they were getting out of their jobs. Will you agree with me on that?

Mr. FARISH. Senator, I don't like the "totally oblivious." That carries an inference that I didn't put into my statement.

The CHAIRMAN. Let's strike out the "totally," then.

Mr. FARISH. I simply tried to depict the fact that corporate management was built on something else than earning a salary. If you are speaking of high salaries that are built up on the basis of bonuses or profit sharing, I think some of them are excessive.

The CHAIRMAN. That is the point. Now, what check is there on that in this corporate set-up of which we have been speaking? What possible check can the small stockholder exercise?

Mr. FARISH. The small stockholder, if he thinks it is bad enough, can protest, and he can change it in time.

The CHAIRMAN. You are familiar with the story of Bethlehem Steel?

Mr. FARISH. Yes, sir; I have heard a little bit about it.

The CHAIRMAN. Protests in that case didn't amount to very much, did they?

Mr. FARISH. I think it amounted to quite a bit. I think corporations must live—as I express it in my paper, they do live and must live in a gold-fish bowl, and the more of those kinds of things that are brought out in the stockholders' meetings, the quicker they can make the change.

The CHAIRMAN. In pursuing this study I don't like to draw a personal illustration.

Mr. FARISH. And I don't either, Mr. Chairman, because I want to make this statement: Where I say some of these salaries are excessive, they are excessive relatively. I would like to put that in. There are some men that are running some of these corporations that are worth almost anything, but I don't think you can measure their value to the corporation in terms of a few hundred thousand dollars.

The CHAIRMAN. I am concerned about the fundamental structure of management and its fundamental responsibilities. We have been speaking about checks, and it has been your thesis that there are sufficient checks in the institution as it now exists. Is that a proper interpretation of your position?

Mr. FARISH. As to salaries that are paid?

The CHAIRMAN. No; as to the action of management. I want to find out what these checks are.

Mr. FARISH. I would put it this way. I don't know any other checks, I don't know any better system, than we have.

The CHAIRMAN. Well now, we don't have any checks exercised by the stockholder. We are agreed on that.

Mr. FARISH. No, sir; we are not agreed.

The CHAIRMAN. The small stockholder? Did you not testify in response to Mr. Sumners' inquiry that as a matter of fact the small stockholder can exercise very little control?

Mr. FARISH. He can't exercise any control, but he can exercise a great deal of influence. In other words, we have got to get the difference measured here that we are talking about. If I regarded the purport of Mr. Sumners' question, it was, could the small stockholder overthrow bad management?

The CHAIRMAN. And you gave as an illustration the case of the Standard of Indiana.

Mr. FARISH. No; I said I didn't think he could. I didn't think the small stockholder could do that.

The CHAIRMAN. So far as that is concerned, the small stockholder does not exercise a very effective check. Are we agreed on that?

Mr. FARISH. That is all right.

The CHAIRMAN. Then what other checks are there upon management that do not flow from within the management itself, that do not depend upon management's own sense of responsibility and integrity, which I acknowledge is very high?

Mr. FARISH. What are the public checks, you mean, on bad management?

The CHAIRMAN. Yes.

Mr. FARISH. I don't know, Senator, that I can tell you.

The CHAIRMAN. Do you think there should be some?

Mr. FARISH. I have mentioned the fact that the company reports are submitted to the stock exchange, and they can't borrow money without a disclosure of all purposes to the S. E. C., and so on, but when you ask "What are the public checks?" whether the public has a method or a means of knowing whether or not Mr. President So-and-So is thinking right or doing right, I don't know that.

The CHAIRMAN. Well, do you think that there ought to be any?

Mr. FARISH. I don't; no, sir. I don't know of any that could be put in.

The CHAIRMAN. You think that the present system is as perfect as human frailty will permit it to be, is that your idea?

Mr. FARISH. I wouldn't go that far, but I think that the present system is as perfect as any one that I know.

The CHAIRMAN. We have a system under which, as has been testified before this committee and as is well known to everybody interested in corporate development and corporate structure, whereby those who desire to form a corporation may go to a State which has loose charter laws and obtain from that State the corporate power to do whatever they please. Is that not so?

Mr. FARISH. Well, I don't know what State you are referring to. Perhaps you are referring to Delaware.

The CHAIRMAN. Of course I have Delaware in mind among others.

Mr. FARISH. Delaware is a very popular State for incorporation of corporations, both on the part of the Federal Government and on the part of individuals.

The CHAIRMAN. There is no doubt about that.

Mr. FARISH. They like to go to Delaware.

The CHAIRMAN. Because of the free rein which the State laws give to those who are managing the corporation.

Mr. FARISH. Well, I wouldn't say—

The CHAIRMAN (interposing). That is one reason, is it not?

Mr. FARISH. I would say "liberal" rather than "free rein," and I would say also that there are some other States that are practically as liberal as Delaware.

The CHAIRMAN. Certainly, certainly.

Mr. FARISH. Delaware happens to be close to Philadelphia and close to New York and close to Washington, and it has got a drag on the trade.

The CHAIRMAN. And do you think that that is a highly desirable situation? Do you or do you not?

Mr. FARISH. I don't know just how to answer that.

The CHAIRMAN. Let's forget Delaware.

Mr. FARISH. It is a situation that has developed over the years, and all of these States who offer charters to corporations are in a sense either competing with each other or saying, "We don't want any of the birds here," and they just keep them out.

The CHAIRMAN. That is exactly what we are talking about. Is it, in your opinion, a desirable thing to have the States competing with one another to issue liberal charters, to use your phrase—

Mr. FARISH (interposing). All right, sir.

The CHAIRMAN. For corporations to engage in national and international business?

Mr. FARISH. I can say most emphatically it is.

The CHAIRMAN. That's right. I wanted to find out what your view was. Now, why do you feel that it is a desirable thing to permit corporations engaged in interstate commerce to write their own tickets, as they substantially may, under the liberal laws of some States?

Mr. FARISH. Well, I don't like that "writing their own tickets."

The CHAIRMAN. Isn't that the fact?

Mr. FARISH. No, sir; it is not a fact. I don't know any corporate laws that permit any corporation to write its own ticket. Some of them are more liberal than others, but none of them permits you to write your own ticket, Senator.

The CHAIRMAN. We can write our own ticket in Delaware, let us say, with respect to the payment of dividends out of surplus, though that surplus may be paid-in surplus. Do you think that is a desirable corporate practice?

Mr. FARISH. I do not; no, sir. But it might be a desirable corporate practice if it is labeled as a liquidating dividend. All you have to do is call it by another name.

The CHAIRMAN. But the State law of Delaware does not permit that. Do you think it is a desirable or undesirable——

Mr. FARISH (interposing). The State law of Delaware does not permit that?

The CHAIRMAN. Does not provide that it shall be so labeled.

Mr. FARISH. Now, Senator, you are getting me in the details of corporate law, and while I like the idea of discussing with you any subject, I must admit my lack of information, perhaps, to go down the corporate law line.

The CHAIRMAN. Well, then, I won't pursue that, but I was merely discussing the statement that you made this morning, that any implication that because stockholders sign proxies rather than attend meetings, corporate managers are free to manage without regard to the interests of the stockholder, is most emphatically not true. I was merely pursuing that thought, to find out to what extent in your opinion there should be a public rule in the public interest to protect the stockholder and the public with respect to the management of these great organizations which exercise such a tremendous effect upon the economic welfare of the people. For example, you testified that, with respect to the concentration of economic control, why should the number be 20, you asked, with respect to the 20 companies which have been cited as the major companies in the oil industry, and then you said, "In the automobile business, which is admitted to be highly competitive, 3 companies control a higher percentage of business than do 20 companies in the oil industry."

Evidently you felt that this concentration is more evident in other industries than it is in the petroleum industry.

Mr. FARISH. I think that is correct.

The CHAIRMAN. I think it may be properly stated that it is characteristic of most industry now, of most big business. There is this concentration of——

Mr. FARISH (interposing). Senator, did it occur to you that there is probably less than there has been in the past in a good many industries?

The CHAIRMAN. Well now, that would be a very interesting thing for you to develop. We would be glad to know your views on that. A great deal of testimony has been presented to us throughout these hearings to bear out what you have said with respect to the automobile industry, that there is concentration.

Mr. FARISH. Well, I am not prepared to do it now, but will make some comments on that before we leave here.

The CHAIRMAN. I will be very glad to have you do it. My point, then, is whether or not in your judgment, as the leader of one of the greatest of all the industrial companies, there should be any public rule to safeguard the public interest when there is such great concentration in these economic concerns that are created in States but do their business throughout the United States.

Mr. FARISH. Well now, I get the point of the question which you didn't state. By public rule you mean if there should be some Federal regulation requiring—

The CHAIRMAN (interposing). Some Federal check, let us say. We are speaking about checks. You say the stockholder doesn't exercise very much. Should there be any check in the public interest? Boil it down to that question.

Mr. FARISH. Any check?

The CHAIRMAN. Yes.

Mr. FARISH. That is a little different. You have got—I will be glad to try to answer the question.

The CHAIRMAN. I thought you would be.

Mr. FARISH. But to try to answer it I would like to get a little clearer definition of what you mean by check.

The CHAIRMAN. I am trying to get an idea of what you meant when you stated this morning that it was emphatically not true that the managers in industry are free to manage without regard to the stockholders. What are the checks that control or restrain or restrict that freedom?

Mr. FARISH. There is no Federal check, if you want to put it that way, other than disclosures to the S. E. C. You know, of course, every one of these corporations have to make income-tax reports, and that the Bureau of Internal Revenue probably knows the A B C in connection with every one of our corporations, and if there is any dust under the rug I presume the Internal Revenue knows about it.

Mr. O'CONNELL. Will you be a little more specific in that? I don't quite understand how the activities of the Bureau of Internal Revenue operate as a sort of check.

Mr. FARISH. I didn't say they operated as a check, I said they operate as a question of information.

Mr. O'CONNELL. So it is a check.

Mr. FARISH. As to the activities. I go under the theory, Mr. O'Connell, that if everybody can see everything in the goldfish bowl that in itself, publicity, is sufficient check.

The CHAIRMAN. How much publicity is there with respect to income-tax returns?

Mr. FARISH. I doubt whether there is very much, but it is a disclosure, Mr. Chairman, of all of the facts in the case. And my own opinion is, taking the thing all in all, that corporate management today is pretty well sized up and checked in many directions, and I

personally don't know any Federal action that would be helpful in the situation.

The CHAIRMAN. Well, then it is your opinion that there should be no Federal action of any kind?

Mr. FARISH. Yes, sir; I state that as my opinion.

The CHAIRMAN. But the checks which are exercised by State authority over interstate business are how effective?

Mr. FARISH. I don't think they exercise any, do they?

The CHAIRMAN. That is what I thought. You are not conscious of any check in the public interest exercised over your company by the State of New Jersey, are you?

Mr. FARISH. No, sir.

The CHAIRMAN. Are there any other questions?

Senator KING. Isn't it a fact that the State of New York has a statute under the terms of which there is a rather close check of the activities of corporations when they issue stock, the purposes for which the stock is to be issued, whether dividends are to be paid, and the funds from which they are to be paid?

Mr. FARISH. Yes, sir; I think that is true, Senator. I think most States have rather strict rules, laws, as to corporate activities.

The CHAIRMAN. What effect do those laws have upon corporations which are created by the States which have the loose laws requiring no checks? What effect does the law of the State of New York have on a Delaware corporation?

Mr. FARISH. I couldn't answer that. That is a legal question.

The CHAIRMAN. The question was directed to Senator King.

Mr. FARISH. I would like to state in that connection I think we have a law in Texas, for instance, that no corporation can pay a dividend unless it is earned.

Senator KING. Isn't it a fact that for a number of years—

Mr. FARISH (interposing). In other words, from earnings.

Senator KING. Isn't it a fact that for many, many years with respect to the mismanagement of individual business and of partnership business and of corporate business there was considerable sluggishness and torpidity in the mind of the public? In this spirit of free enterprise and competition we said to everybody, "Go into business and do the best you can," but later when it was discovered that individuals, partnerships, and corporations oftentimes violated the laws of ethics and morals, if not statutes which ought to have been passed and some of which were passed, with this development of a new consciousness the States and municipalities have awakened to the responsibility, and that there is a larger control of corporations now by the States than ever before, and that that consciousness is developing a demand for increased statutes. An investigation which was made by Mr. Justice Hughes of insurance companies a number of years ago aroused the American people, as a result of which statutes were enacted which largely dealt with the insurance companies.

So the fact that we have not been as active as we have been morally in meeting the responsibilities is no justification, is it, that we shall superimpose upon the people powerful Federal control or State control which might interfere with legitimate activities?

Mr. FARISH. I agree. I want to add one thing else to what you have just said. The modern development of corporate management and corporate check and criticism leads me to the belief, at least, that

no large corporation can successfully exist today that hasn't public opinion with it. In other words, if they haven't the support of the public they are just a bad egg.

Senator KING. One other question. We try to ascertain the kind of returns which are being made by corporations as well as by individuals to the Internal Revenue. Isn't it a fact that those returns are scrutinized and oftentimes demands are made for an amplification of returns, they look into the capital stock, whether there has been a stock dividend, in other words that the Internal Revenue has a new procedure, a new technique, resulting in part from acts which have been passed during the past 15 or 20 years, and has more of a check, a considerable check, over corporations, their plans, their developments, the disposition which is made of capital as well as of resources and of any income.

Mr. FARISH. Yes, sir.

Mr. O'CONNELL. As I understand it, the function of the Bureau of Revenue of the Treasury Department is to see to it that corporations making returns report and pay income tax on their earned income and they have no function as regards corporate practices as such or managerial policies which may or may not be in the interests of the public. I didn't understand that the Bureau of Internal Revenue went to the extent that the Senator seems to indicate.

Mr. FARISH. I think I covered that, Mr. O'Connell, a little while ago, when I said that simply is an exhibition of the goldfish bowl again. They know all there is to know about the corporation and what is going on. After all, I am of the opinion that that is the best protection for anybody—publicity.

Dr. LUBIN. Mr. Farish, following along that same line of discussion, are there any States that you know of which compel corporations to give information which makes it possible for any stockholder to know what the operations of his firm are like? For example, reports have come to this committee that in making purchases, purchases frequently go to friends of members of the board of directors, irrespective of the fact that the purchase may have been made elsewhere at a lower price. One hears occasionally of retainers that are being taken on who serve no particular function but because they happen to be a friend of a certain officer of the corporation—

The CHAIRMAN (interposing). Let me interrupt at this point. Mr. Lubin is opening a very wide field. It is 12:30. Would you mind letting that go until this afternoon? If it will be agreeable the committee will stand in recess until 2:15 and we will resume the discussion.

(Whereupon, at 12:30 p. m., the committee recessed until 2:15 p. m. of the same day.)

AFTERNOON SESSION

The hearing was resumed at 2:35 o'clock, upon the expiration of the recess.

The CHAIRMAN. The committee will please come to order.

When we adjourned this morning Dr. Lubin was about to address some questions to the witness. Is the doctor still here. Yes; here he is.

Dr. LUBIN. Mr. Farish, in connection with the problem we were discussing immediately before recess, Senator O'Mahoney had asked you the question as to what protection there is in law, and after all the only laws that affect these corporations in terms of their structure are the State laws, either to protect the individual small stockholder against abuses of corporate privileges by the management, or even to make it possible for him to find out what is happening in this corporation, and I mentioned before adjournment, if you remember, charges that are made, for instance, that in some instances it has been known that the corporation places orders with a given company not because their product is any better—the fact is their product may be even more expensive—but because somebody on the board or somebody in the management had a friend who owns that company, and, of course, all of us who have looked into corporation problems are acquainted with the hundred and one different charges that have been made against the mismanagement of corporate affairs.

Now, how can the individual stockholder ever find out about these things happening?

Mr. FARISH. Well, I think he can go to the annual meeting and ask questions.

Dr. LUBIN. How would he know? I have in mind the case of a rather large manufacturer who told me once that for 24 consecutive years he bid on a large order issued by a very large corporation each year. He never received the order in 24 years, yet in 4 of those 24 years he manufactured the product for somebody else who got the order. In other words, the person who got the order apparently could afford to pay him the price that he bid and yet sell it to that corporation at a profit.

How would anybody know those things are going on?

Mr. FARISH. The only way I know to answer that, Doctor, if he is interested enough in it to pursue it, he can go to the annual meeting and put the management on the spot, or put them in the limelight on those questions.

Dr. LUBIN. That assumes he knows it. It assumes the stockholder knows that these practices are actually—

Mr. FARISH (interposing). He doesn't have to know it to ask questions. He can suspicion it.

Senator KING. Would not the courts be open to him, and he could bring a suit in equity alleging the fraudulent or secret actions of the board under the terms of which stockholders were deprived of their rights, and get a mandatory injunction to compel them to expose to his view the books and to restrain them from making contracts that were immoral and violative of the rights of the stockholders? I know of many cases where, when I was practicing law, a small stockholder would bring an injunction suit to restrain the directors from executing a policy which he had heard indirectly they purposed to carry into effect. The court would compel a disclosure and issue a temporary restraining order to restrain the directors from carrying out that policy which he alleged (the complainant) violated the rights of the stockholders and was unjust.

The courts will redress wrongs, of course. I agree with the inference that might be drawn from the situation, that a small stockholder might not have the means and it would be a very difficult thing per-

haps for him to inaugurate legal proceedings and carry them through to a successful issue for the protection of his own rights and for stockholders similarly situated, but isn't it a fact that frequently a suit may be brought by one stockholder and he does it in behalf of all other stockholders similarly situated, and in many instances a score or more of stockholders will associate themselves with the complaining witness and adopt his averments in the complaint and join with him in asking the relief?

Mr. FARISH. I think that is a possible remedy at law; yes, sir.

Dr. LUBIN. All I am trying to get at, sir, is trying to find out whether or not there are any ways in which, either through legislation or through voluntary action on the part of industry, those people who own the corporation can know what is going on in the corporation without having to wait until the deleterious results in terms of losses and bankruptcy might show up.

Mr. FARISH. Well, the only way I know, Doctor, is to go back to the illustration I tried to picture in talking about the goldfish bowl, and that is they can go to the stockholders' meeting, they can air any questions they want to, they can bring out any complaints they care to bring out, and they can put management on the spot on all of these questions such as you are describing.

Dr. LUBIN. But you are assuming that he knows what is happening.

Mr. FARISH. He doesn't have to know. He can go there and ask these questions whether he knows them or not. In other words, as I look at it, corporate management today is always on the spot.

The CHAIRMAN. Is that a realistic approach to the problem? How many corporations do we all know of so as not to make any particular reference to a particular case, which are incorporated in one State, have their place of business in another State, have the site for the holding of stockholders' meetings in another State, with three principal offices, therefore, stockholders scattered throughout the United States, and a practical impossibility upon the part of the masses of small stockholders to attend stockholders' meetings called in a distant State remote from their residence? That is a practical situation that frequently develops, is it not?

Mr. FARISH. Why, I don't like the emphasis on "remote." I think most stockholders' meetings are held pretty close to the center of activity and the center of ownership of the stock, and it requires very little effort for any stockholder to get to an annual meeting.

The CHAIRMAN. I have known of corporations, and in the petroleum industry, operating out in the Rocky Mountain area, whose stockholders' meetings were held up in the State of Maine—utterly impossible for any large number of small stockholders to attend. Now, of course, I conceive—

Mr. FARISH (interposing). In that case, I grant you that, certainly.

The CHAIRMAN. Of course, one very good answer to any question dealing with this question of the rights of small stockholders is that many of them don't want to exercise any degree of policy control over the corporation. I suppose that most of the stockholders in the Standard Oil of New Jersey, for example, who own 100 shares or less each are perfectly willing to allow the management to continue to run the affairs of that corporation and wouldn't be interested in

attending the stockholders' meetings. It might be interesting to know what your experience has been in inducing them to come, how successful has that been?

Mr. FARISH. It is not very successful. I think we had the largest stockholders' meeting that I can recall in the history of the company last summer, and I don't remember the exact figure, but there were something over 200 people there. But most of those people, I should say not most of them but a large number of them, however, were investment trust representatives who probably in turn represented a good many stockholders. They are the critics, speaking now of my own business and that which I am familiar with; they are the best critics, if you want to put it that way, outside of our own organization, our own company management.

Senator KING. These investment corporations acquire stock in the company or represent stockholders?

Mr. FARISH. Yes, sir; and they make it a business to compare corporate earnings, corporate policies, corporate management, and they always have a good many questions to ask.

Senator KING. Do you prepare at the termination of the year or before your annual stockholders' meeting a statement of the activities of the organization during the preceding year, showing its earnings if it has any?

Mr. FARISH. We issue an annual report before the meeting.

Senator KING. Does that go very much into detail showing the activities?

Mr. FARISH. Yes, sir.

Senator KING. Production and sales?

Mr. FARISH. Yes; bookkeeping changes, and so on.

Senator KING. Is that published?

Mr. FARISH. Published and distributed.

Senator KING. Is any general circulation of the same provided for?

Mr. FARISH. To all stockholders. Anybody that wants a copy gets it if they write in for it but it is sent to all stockholders.

Senator KING. Sent to all stockholders. How many names have you on your stockholders' list?

Mr. FARISH. I think it is about 133,000.

Senator KING. And you transmit a copy of the report to each stockholder?

Mr. FARISH. Yes, sir.

The CHAIRMAN. Isn't it a fact that in recent years there has developed more frequently than ever before a difficulty in securing the proxies of small stockholders?

Mr. FARISH. Not with us.

The CHAIRMAN. No; I am sure it hasn't happened to you, but that has been brought to my attention on numerous occasions, that stockholders' meetings have had to be postponed because of the indisposition of stockholders to send in their proxies so that a majority under the charter was not present when the meeting was called.

Mr. FARISH. That is probably true. I have no accurate knowledge.

The CHAIRMAN. Now, the question which interests me particularly in this whole matter of the corporate structure of a national cor-

poration, is the degree to which standards of corporate responsibility and management should be set in the public interest. Do you care to make any comment upon that?

Mr. FARISH. No; no further than I have.

The CHAIRMAN. Well, under the system that we have it is obvious that there is no standard set by law, is it not?

Mr. FARISH. Well, there are some standards set by law, certainly.

Senator KING. Set by the State under which the corporations are formed.

Mr. FARISH. Standards set by the charter, standards set by the by-laws, standards set by obeying the law, and so on.

The CHAIRMAN. Well, there is no standard of accounting, for example, set by the Delaware corporation law.

Mr. FARISH. I couldn't tell you whether there is or not.

The CHAIRMAN. That is a fact.

Mr. FARISH. There probably is, I don't know.

The CHAIRMAN. So the standards of which you speak are those which are developed from within. Now let us grant without any argument at all—certainly I would be the last one to raise an argument about it—that in 90 percent of the cases, management is motivated by the very highest standards and purposes, but it remains, as I think you testified earlier in the morning, that the checks and balances upon management are those which management itself develops, those which result from living in the goldfish bowl, as you express it, but this goldfish bowl of which you speak is only that which rests on the table in the stockholders' meeting or before the Internal Revenue Bureau when the tax return comes in, neither of which is very evident.

Mr. FARISH. Well, I would differ to some extent with that statement. I think the goldfish bowl rests on the financial page of practically every newspaper of the United States, it is on the front page of practically every newspaper in the United States; it is in the legislative hall of practically every State in the Union, it is in the Congress of the United States, it is before investigating bodies of one kind and another almost constantly, it is represented by not only the Bureau that you speak of, it is represented by answers to questionnaires, reports on the business filed with Government authorities in such an innumerable quantity that we can hardly keep up with them.

The CHAIRMAN. I recognize that, and this committee has contributed a good deal to it.

Mr. FARISH. Just an expression on that point: During the lunch hour one of my associates in this hearing handed me a statement to the effect that his company in 1937 filed 71,307 reports with governmental authorities, so I think this goldfish bowl is pretty well exposed.

The CHAIRMAN. I am not at all surprised at that particular circumstance and wouldn't be disposed to question it, but I do suggest to you and to those who may be interested in a particular instance, that one reason why there are so many questionnaires proceeding from Government authority is that there is no national standard by which national corporations may be guided.

Senator KING. I would differ from that statement just a bit. In the first place, I don't concede that there should be a national stand-

ard. These corporations are organized under the laws of the States and I for one am not willing yet, though there are many who desire that, to destroy the autonomy of the State and to turn over corporate business and individual business to the control of the Federal Government upon the ground that A or B or C lives across the line and doesn't live in the State in which the organization was formed. I don't concede it is important there should be a national standard. There is too much standardization now in Germany and in many other countries, and I don't want any such standardization here superimposed upon every individual and every corporation and every partnership and every element of business under Federal control.

The CHAIRMAN. That isn't standardization, that is regimentation.

Senator KING. It is both; but standardization leads to regimentation.

The CHAIRMAN. And as for autonomy, I rather imagine neither the State of Utah nor the State of Wyoming exercises very much control or jurisdiction over the forms and powers and authority of the Delaware corporations which do its business.

The VICE CHAIRMAN. I assume that the witness is not compelled to decide which—

Mr. FARISH (interposing). I am not the Solomon in this case, Mr. Chairman.

Mr. BALLINGER. Mr. Farish, you presented a very interesting theory to the committee this morning that one of the best checks on corporate management is the action of management itself. That is to say, I got the idea from listening to you talk that if a corporation executive or director is betraying his trust, the other good directors gang up on him and push him out of the corporation. Is that about what you were trying to convey?

Mr. FARISH. Well, you might state it that way. I don't think I stated it exactly that way, Mr. Ballinger. What I meant to state was that inefficiency and misconduct or wrongdoing in corporate management finds its check and its critics a little quicker than it does normally in any other realm of activity that I know of.

Mr. BALLINGER. Well now, first I want to make two statements. I recall that Mr. Whitney was not removed from the New York Stock Exchange until the Government completely discredited him. I don't think the Chase National Bank removed Mr. Al Wiggin until the Government completely discredited him. I think that is true of Mr. Charles Mitchell, and Mr. Grace is still with the Bethlehem Steel, and although they got Mr. Stewart out of the way, Mr. Doheny and Mr. Sinclair, who were sort of particeps criminis to the matter, were not removed.

I just wonder when this theory of yours is going to work.

Mr. FARISH. I don't propose to get into that argument. You have mixed up a lot of things in that statement. Some of them I question. I don't think it is pertinent to this.

Mr. BALLINGER. I think it is very pertinent in testing your theory.

I want to make a further statement. In the past 8 years the Government has made many investigations. Anybody who wants to read those investigations, and read them thoroughly, is not only amazed but highly shocked at the low standards of ethics prevailing among certain corporation directors in certain industries. Now,

we have had such a welter of investigations the last 8 years that your statement about the so-called uprightness of corporate management—I mean I might say—is rather optimistic, and I want to read into the record some of those investigations so that somebody who might want to compare your statement with the record might have the opportunity to do so.

The Government made a tremendous investigation of the shipping industry, and found that industry was not only robbing its Government but robbing its stockholders, and so reported.

Mr. FARISH. What shipping industry?

Mr. BALLINGER. Maritime—the shipping investigation, Government ship subsidies.

Mr. FARISH. Not independent shipowners.

Mr. BALLINGER. Yes; they investigated independent shipowners, too. They investigated how they acquired their ships, what price they paid for them; they investigated collusion that might have existed.

Mr. FARISH. Do you mean individual shipowners?

Mr. BALLINGER. Individual companies.

Mr. FARISH. We operate the biggest fleet under the American flag. Were we investigated?

Mr. BALLINGER. I don't know.

Mr. FARISH. We were not investigated.

Mr. BALLINGER. You weren't investigated? What company do you represent?

Mr. FARISH. We operate the Standard Oil Co. of New Jersey. We own the largest fleet flying the American flag, and we were not investigated.

Mr. BALLINGER. They were investigating shipping companies. Do you want me to go get the record and read in here from the so-called Senator Black's investigation? You were spotless here, but the others weren't.

Investigation of the banks of New York City by the Pecora investigating committee, in which they found the directors borrowed large sums of money from the banks and wrote them off.

We have before us the failure of the Michigan banks, a topsyturvy story of holding companies and collusion, graft, wheels within wheels, until you are fairly staggered.

You have the failure of the Cleveland banks and the story of the Van Sweringens; you have the gigantic investigation of the protective committees by the Securities and Exchange Commission, a sort of hideous document if you want to read it all the way through. You have the investigation of the public-utilities industry which resulted in the enactment of the present law. That was quite a story, too.

You have the investigation of the aviation industry; the investigation of chain stores by the F. T. C.; you have the investigation of farm machinery by the F. T. C.; you have the investigation of railroad mismanagement by a special committee of the Interstate Commerce Committee of the Senate, which went into the wrecking of the Chicago, Milwaukee & St. Paul and the wrecking of the St. Louis & San Francisco Railroads.

It is well known about the reorganization of the Goodyear Tire Co., the story of which is found in a delightful volume called "Graft in Business," by John T. Flynn.¹

You have the investigation of the steel industry in the last 5 years by the Federal Trade Commission; you had a shocking story of investigation of investment trusts by the attorney general of New York State. The S. E. C. is now making a further investigation of it.

You had an investigation of the stock exchange by the Pecora committee, which was certainly startling. You had an investigation of tax dodging by the Pecora committee, equally startling. You had the Bethlehem Steel Corporation bonus case and the monopoly of the milk industry.²

And so it might go. You might read a great many investigations in here. The point I want to make is, if you want to read the record, and that is the only thing we can go on, I think your statement is considerably optimistic.

Mr. FARISH. All right, sir; you are entitled to your opinion.

The CHAIRMAN. Are there any other questions on this phase of the statement? You may proceed, Mr. Farish.

POSSIBLE EFFECTS OF INTEGRATION

Dr. LUBIN. May I ask a question of opinion, Mr. Farish? In talking about concentration of control in your memorandum this morning, the question occurred to me as to whether or not there was any fundamental difference between less large aggregates of capital which maintain their relationships through holding companies, and independents who have no such relationship. The thing I have in mind is this: Could you, for example, through your holdings in Humble and other companies, get them to do things which I as an independent couldn't do with my competitor because I would be subject to antitrust laws and you wouldn't?

Do you see what I mean? If I tried to get him to do something I may be in danger; but you, after all, as chairman of the board, let's say, or president of the corporation, could tell your subsidiary to do things which two independents couldn't do in collusion.

Mr. FARISH. What is the point you are driving at?

Dr. LUBIN. Does that mean that through this integration, through holding companies and otherwise, you have a superior position in the economic field as compared to the independent competitors who can't work together that way?

Mr. FARISH. Superior position in the economic field? I have to understand just what that means, Doctor, to get at it. Do you mean by reason of the fact that a holding company may have a half dozen operating companies they cover a broader field, do a larger volume of business?

Dr. LUBIN. Your five subsidiaries can be told to follow a certain policy, you see, and they will follow it; whereas five competitors couldn't get together and agree to follow that policy for fear of the Sherman law.

¹ Mr. Flynn's testimony before this Committee appears in Hearings, Part 5.

² A report of the Federal Trade Commission on concentration of control of the sales and distribution of dairy products, marked "Exhibit No. 370," is included in Hearings, Part 7, appendix, p. 3135.

Mr. FARISH. Well, they will follow it if it is for the good of their organizations, for the good of their companies.

Dr. LUBIN. I mean, the very fact that they got together and agreed upon pursuing such a policy puts them in a much more difficult position than it puts you when you say, "This shall be our policy and you other five subsidiaries shall do it."

Mr. FARISH. It gives them a coordinated effort, if that is what you mean, in the matter of policy. Certainly it does.

Dr. LUBIN. Which means, from the point of view of getting—

Mr. FARISH (interposing). You mean they are enabled, in that way, to affect a larger volume of business in the matter of policy than six or eight people who are not integrated in holding-company cooperative effort could do by getting together and deciding they will follow it.

Dr. LUBIN. Not exactly. For instance, you use the same marketing policies. Five competitors can't get together and do that without violating the Sherman Act, or at least fearing to.

Mr. FARISH. We follow in our marketing organization a common policy, as far as the Standard Oil Co. of New Jersey and its direct subsidiaries are concerned. We have no direct influence on the marketing policy of the Humble Corporation, for instance. They run their own business.

Dr. LUBIN. I mean if, for example, their policy was in conflict with yours, you as the holding company could make their policy conform to yours, should you so wish.

Mr. FARISH. Make Humble's?

Dr. LUBIN. Yes.

Mr. FARISH. I don't know whether we could or not. We could argue with them, but after all the final decision would have to be made by the Humble board.

Dr. LUBIN. And who elects them?

Mr. FARISH. The stockholders.

Dr. LUBIN. Who are the stockholders?

Mr. FARISH. We own 70 percent of the stock.

Dr. LUBIN. So, in other words, you are the stockholder.

Mr. FARISH. The majority stockholder.

Dr. LUBIN. So that what you say goes ultimately, legally.

Mr. FARISH. Well, not as to management. If its management in general wasn't satisfactory we could fire them, if that is what you mean. We could elect other directors.

Dr. LUBIN. Certainly. I mean, in other words, ultimately you say what shall be done. You can say and you have that legal right to.

Mr. FARISH. I would put it that way, we could say, but there again this question of individual management and individual ability comes into the picture. If we disagreed seriously enough with the management of the Humble board, to take that as an illustration, and say, "Well, we are through with you as stockholders, we are going to vote you out," I think it would probably be the worst thing that we could possibly do because how are we going to get six or eight men that are as capable as those men are, who are now running the business, to take their place? We couldn't do it. It would be like running a horse race without a jockey.

The CHAIRMAN. Do you mean to convey the impression, Mr. Farish, that the directors of the Humble Oil Co. as a matter of actual fact

exercise complete authority over all the affairs of that company without the supervision of the parent company?

Mr. FARISH. I mean to say that they exercise the final judgment and the final decision on all matters connected with that business.

The CHAIRMAN. That, of course, might be very true and still the parent company might be influencing the decision. I am trying to find out, if I can, whether there is any line of demarcation with respect to the amount of authority having to do with policies that the directors of such a company actually exercise. Is there any limit on it or do they have complete control?

Mr. FARISH. They have complete responsibility for making the final decisions in all matters of policy.

The CHAIRMAN. But there again the answer isn't quite clear in my mind. Of course as directors they have complete, final, legal responsibility for the decision, there can be no doubt about that.

Mr. FARISH. That is correct.

The CHAIRMAN. And if those decisions didn't satisfy—

Mr. FARISH (interposing). The larger stockholder.

The CHAIRMAN. The majority owner, the majority company, they would vote against them?

Mr. FARISH. At the next annual election.

The CHAIRMAN. That is right, but in the meantime, as a matter of fact, do the directors exercise complete independence, actually, or do they consult the parent company in formulating the policies, though they have the responsibility?

Mr. FARISH. Well obviously, the parent company being the largest stockholder, and being their largest customer, taking some 65 or 70 percent of all of the crude oil and refined products Humble has for sale, they are bound to consult and must consult a customer of that size.

The CHAIRMAN. I would imagine so.

Mr. FARISH. Our general facilities are the logical outlet for all of Humble's products.

The CHAIRMAN. In other words, the policies of Humble are not as free from influence on the part of the parent company as they would be if the parent company did not hold that stock?

Mr. FARISH. That of course is obvious.

The CHAIRMAN. So that such a subsidiary operates as a unit in the large corporate structure, does it not?

Mr. FARISH. No, sir; not as a unit. It operates as an affiliate in the large corporate structure.

The CHAIRMAN. So that the policy of a subsidiary and the parent company are one policy, they constitute one policy. That would be a normal and actual thing.

Mr. FARISH. Well, yes; you might say one policy, but that doesn't cover it, Senator. The Humble's operations are different and they are not world-wide, they are confined to Texas, South Louisiana, and New Mexico, and the Humble is essentially a producing and transporting company, and therefore in the matter of policy there isn't much chance of conflict between the general policy of the holding company and the Humble Co. The Humble is run and has been run since its inception for the benefit of the Humble Co. I was in at the beginning, I was the first vice president, and I was president until 1933, when I had that responsibility, and we not only

had that responsibility from the point of view of a minority stock ownership in Humble that largely lives in Texas and is vitally interested in it, but we had the obligation of law in the State of Texas to run the Humble Co. as a unit, as an individual business.

The VICE CHAIRMAN. Whatever is to the benefit of the Humble Co. is to the benefit of the holding company.

Mr. FARISH. Yes, sir.

The VICE CHAIRMAN. And that is the reason you don't interfere as long as they are doing a good job.

Mr. FARISH. That is correct, sir.

The VICE CHAIRMAN. They are entirely independent as long as they do just as you want them to do.

Mr. FARISH. No, sir; entirely independent as long as they are doing a good job and running the business efficiently.

The VICE CHAIRMAN. That is the kind of job you want them to do.

Mr. FARISH. Yes.

The VICE CHAIRMAN. That is obvious, I guess.

The CHAIRMAN. Are there any other questions on this phase of the statement. You had come to—

OPPORTUNITIES FOR THE INDEPENDENT IN PRODUCING

Mr. FARISH. "Opportunities for the independent in the producing branch of the industry." I might read that. If you have read it, I might skim through it.

The exploration for and the production of crude oil has long attracted independent businessmen. The prospect of becoming a millionaire almost overnight on a relatively small investment has always been an inducement to a large number of persons to risk their capital in production.

Mr. DeGolyer¹ testified that while the large company has certain advantages over independents the "independent will be a wildcatter as long as there is any oil industry left to wildcat in." Mr. Crowley¹ testified that the independents had been the chief discoverers of new fields as a result of their wildcatting operations. The record shows that 18 major oil companies, not including Mid-Continent Petroleum Corporation and Standard Oil Co. of California (that is because they didn't respond to the questionnaire as I understand) owned 95,000 wells of some 360,000 in the United States in 1938. Even after allowance is made for the unknown data of these two major companies, it is safe to generalize that most of the oil wells in the United States are owned by independents. It is impossible to tell how many wells are owned by large-scale and how many by small-scale independents. The record is clear as to the past and present opportunities for the independents, but the vital question is as to the future.

The credit for the discovery of America's oil fields goes to the small exploratory enterprise rather than the large organization. It is the individual, the small company, the so-called independent, the itinerant wildcatter who has found America's oil. This has been true in the past and it is true today. In my judgment, it will be just as true 10 years from now. The truth of this statement, that the discovery of new oil fields is usually made by the small fellow rather than the integrated company, is borne out not only by the statistics kept by

¹ Testimony of both gentlemen appears in Hearings, Part 14.

our own company, but by the observations of others outside our organization.

The CHAIRMAN. Do you think it is more expensive now to discover oil than it used to be?

Mr. FARISH. There again, Senator, we have to be a little more definite. I am coming to that, I think, in the memorandum, but it depends on the territory you drill, the area, and so on. We have always had shallow oil fields and deep oil fields in this country. In later years they have become deeper and deeper, but if you let me read on, I think I will cover that.

It is worthy of note that the costs of finding oil in America have progressively declined over the last 20 years, in spite of the diminishing number of oil fields yet to be found, and in spite of the constantly increasing depth to which the drill must go to encounter new petroleum reserves. In my judgment, finding costs 20 years ago for the industry at large averaged 50 cents per barrel. Ten years ago they were down to 25 cents per barrel. Today they are estimated to be on the order of 15 cents per barrel.

The CHAIRMAN. That is one way of calculating cost. The problem that I have in mind is that of the amount of capital which the prospector must now invest in the search for oil as compared with what he would have to raise 10 or 20 years ago, and whether or not it isn't a fact that since drilling must now be very much deeper, it is not now a much more costly enterprise to sink the well, though eventually the cost of producing per barrel may be lower.

Mr. FARISH. May be lower?

The CHAIRMAN. Yes.

Mr. FARISH. Well, yes; but let's look at the most recent development in the oil business in the way of finding oil, what occurred in Illinois, and the cost of drilling wells in Illinois is very low. The wells are comparatively shallow and it is just as easy for an individual to wildcat in Illinois today as it ever had been in the industry. By easy, I mean the opportunity is there and the cost per venture.

The CHAIRMAN. That is because the wells in Illinois are shallow.

Mr. FARISH. Yes, sir; just as has been the case always in the oil industry. There are some areas where it is shallow and some where it is deep.

The CHAIRMAN. I was thinking of the average to which you were referring when you spoke of the constantly increasing depth to which the well must go, so that even though there are still shallow fields to be found, on the average the industry must go deeper now than ever before.

Mr. FARISH. The deeper-well cost is increasing; yes.

The CHAIRMAN. So that to find oil in the deeper sands requires the investment of more capital than before.

Mr. FARISH. Yes, sir; that is unquestionably true.

The CHAIRMAN. And that in turn would make it more difficult for the so-called small man to engage in prospecting, but that prospecting still goes on, you say.

Mr. FARISH. That may be true; but the so-called small man seems to be growing larger, and the ability of the so-called small man to join with other small men seems to be facilitated, to the end that this discovery of new areas by the independents—I go back to the word "independent"—is just as good today as it ever has been.

The VICE CHAIRMAN. They block out an acreage and then get other people to help contribute the money to make the exploration.

Mr. FARISH. Yes, sir. To give you one practice that is common in the oil country, some entrepreneur—I don't like to call him a promoter, but "promoter" is probably a little more familiar to the oil man than the other one—some promoter will get the idea either from the study of geology or from getting a hunch, if you will, or a tip from somebody who has studied the geology and maybe has used new geological methods, that a certain area is favorable, and he looks at that area and he sees that it is a very divided ownership. In other words, two or three or four major companies will own some acreage on it, some of it will be open, and some independents will own some. This fellow says, "I am going to promote a well on that prospect." The well may cost ten thousand, twenty thousand, even fifty thousand dollars, depending on the probable depth you have to go to find oil.

So this promoter goes to this company and that company, another one, and so on, and he says, "I want to drill this prospect. I have 160 acres there of my own. Obviously I can't drill a wildcat well on 160 acres, so are you interested in seeing the prospect drilled," and by one way and another he will get contributions of acreage from other owners and he will get some contributions of what we call in the industry dry-hole money. In other words, somebody will say, "I don't want to give you any acreage but I will give you \$5,000 to pay for a dry hole if you drill it there, in order to prove whether this prospect is productive or not."

We will assume that this promoter gets several hundred acres by donation, several thousand dollars, fifteen or twenty, maybe, and he launches out and starts his well. Of course in drilling that well he will have opportunity maybe to sell some of his acreage to others who think there is going to be oil discovered there and he would like to have a piece of acreage in the field, and he drills his well and pays for it, frequently without any cost to him whatsoever. That is a common practice in the oil industry and it is going on every day, all over.

So this business of the little fellow, Senator, if I may go back to it just a little bit, gets back in the final analysis to how much ability he has got, how hard he is willing to work and how good a salesman he is in getting somebody else to pay part of his bill.

The CHAIRMAN. And your testimony is that the door is as wide open to the little fellow today in the petroleum industry as ever, in the search for oil.

Mr. FARISH. I think so. I honestly think that is the truth, sir.

Mr. O'CONNELL. Do you have any figures as to the trend as to the ownership of proven oil wells or oil fields? Assuming that the opportunity still exists for the small man to discover the oil, have you any information as to who owns the oil after that, or whether he continues to own it or whether he as a practical matter has to sell the well or the product of it to a larger group?

Mr. FARISH. I follow you all the way up to that "has to sell" business.

Mr. O'CONNELL. I am sorry, we will leave that out; does sell.

Mr. FARISH. He acquires the oil and what he does with it is his own judgment. Frequently, if this promoter is the optimistic type,

he thinks he will do better on the next venture and he may sell out and go on to something new, but frequently once an oil producer gets to hold what we call a good property today, he freezes onto it.

The CHAIRMAN. You were dealing with that subject just a few paragraphs further on in the statement.

Mr. FARISH. Yes, sir; I was.

While the above statement as to the cost of finding oil is true, it should be noted that the cost of producing oil in the last few years has risen substantially; among others we note increased taxes, increased cost of materials, increased wages, and increased investment per barrel of oil produced. That is a development in quite recent years.

It is true that exploration for petroleum has become a complicated, specialized art. But it has also become a dependable procedure, and the services of qualified exploratory enterprises are not monopolized by the large units in the producing industry. On the contrary, they are available in every important oil-producing region to the small operator as well as to the large. And these services which may be commanded by the small operator are furnished by skillful, reliable, successful organizations. Thus, possible increases in the cost of exploration (on an absolute rather than a per barrel basis) do not constitute a serious obstacle to the opportunity to use the latest developments, whether they be seismograph, torsion balance, gravimeter, magnetometer, soil analysis, or other methods, at a reasonable fee.

Many independents are enabled to drill wildcat wells because of their ability, etc. I have just described that.

A factor which has been mentioned as likely to restrict opportunities for independent operators is the accumulation of reserves by the major companies. Senator O'Mahoney, for example, asked Mr. DeGolyer: "Would it be proper to say that the independent prospector gets the wells but the big companies get the reserves?" In answer to this question, vigorous prospecting is carried on by individuals and small organizations and by some large oil companies. Many new fields and many new wells are brought in by independents, but it must be understood that these independent prospectors typically are interested in making a quick killing. They wish to sell out to someone else to make a quick profit, to get the present value of future production immediately instead of waiting for 10 to 40 years. As soon as they have turned over a few of their wells and leases on that basis, they seek a new development in order to repeat the process.

The purchasers of the leases held by the prospector are either independent producing companies or majors. Some majors are more successful than others in their own prospecting, and the less successful are quite likely to be active bidders for properties brought in by independent prospectors. Surely if the major oil companies made no effort to protect their large investments in refining by maintaining crude reserves, they would be subject to serious criticism by their stockholders; and if they made no efforts to discover oil, they should be criticized as failing to serve the public interest.

The CHAIRMAN. There was no criticism intended by my question, it was merely to develop the fact, and the fact seems to be that the

answer to that question should be yes, the question that I propounded to Mr. DeGolyer: The independent prospector gets the wells but the big companies get the reserves.

Mr. FARISH. Well, I would say yes with qualifications. Frequently they have to buy them and pay for them.

The CHAIRMAN. Oh, sure; there is no question about that at all. I think it is absolutely correct as you describe it here. The wild-catter having discovered his oil would like to turn his transaction and go on to further discovery.

Mr. FARISH. A perfectly natural thing for an active, optimistic operator to do.

The CHAIRMAN. That is true, and the natural result of it is that the large company with large capital, capable of purchasing the reserves, naturally builds up a larger and a larger ownership.

Mr. FARISH. Individually; yes.

The CHAIRMAN. And grouped together we had the percentages which were testified to here by most of the witnesses. I think that is another one of the facts which is not disputed.

Mr. FARISH. I will come to that later. Collectively, I question it.

Senator KING. Do not many of the independents establish their own refineries, small refineries, in many instances?

Mr. FARISH. Yes, sir.

Senator KING. So that all the refining in a group is not done by the major companies.

Mr. FARISH. No; but most of it is. I will come to that chapter a little later, Senator.

The subsidiaries and affiliates of the Standard Oil Co. (New Jersey) do not produce their reserves as fast as some other firms. One important reason for this situation is that these companies are making a genuine effort to use engineering standards in the development of oil fields so far as competitive conditions permit. They are seeking optimum output from all fields. They expect to be in business many years; it is to their advantage to have a supply of oil at as low a cost as possible for a long time to come; hence, they have every reason to produce according to the best engineering standards.

Another reason why the oil production of major companies is not so high in relation to their reserves as independent oil production is in relation to independent reserves, is that in granting exceptions to spacing rules and in setting allowables in fields in which independent producers predominate, State regulatory bodies do not treat major companies as well as they do the independent operators. The small independent operators are numerous. Not all of them are wealthy men. They are more anxious to obtain their money now so that they can spend it while they are living rather than to pass it on to their grandchildren. As a practical political matter, the State regulatory bodies probably recognize that the corporation can wait better than the people who have votes to cast. This is only human. When a major company is discriminated against too flagrantly, it can and does resort to the courts.

In spite of the practice of cashing in on some of his discoveries and selling them to a major company, thus increasing the major company's proportion of total proved reserves, the small independent has really enlarged slightly his proportion of proved reserves in

recent years. By and large, the independent has held about the same proportion of proved reserves for the last 20 years, but for the year 1938 as compared with the year 1937 the independent has increased his share of total proved reserves.

I think that statement—I am sure it is correct—is rather significant in view of the point we were just discussing, Senator, and that is that over a period of 20 years the independent producer has maintained his percentage of reserves, just about the same percentage to the total, and that in view of the fact that the tendency—and it is a frequent, recurring tendency—is for the independent to sell out to majors ultimately. Yet in spite of his passing on title and reserves to majors, he has maintained a position with the total reserves over quite a long period of time.

The VICE CHAIRMAN. Mr. Farish, is that due to any degree to the fact that proportionately he is discovering more rapidly than the majors?

Mr. FARISH. Surely, surely; that is what I have tried to point out. He is more active; he drills more wells; he drills more wildcat wells.

The VICE CHAIRMAN. He holds a smaller percentage of discoveries, of course.

Mr. FARISH. Yes, sir; something of the order of 40 and 60 percent, somewhere around there.

OIL RESERVES

Mr. FARISH. The majority of the proved reserves of petroleum in the United States today is owned by the major companies. That is to say, if the reserves of every company which owns as much as 1 percent of the total proved reserves of the Nation are added together, the total will constitute more than half of the proved reserves. The balance of the reserves, something less than half the total, is owned by thousands of small operators. At first sight this fact might be taken to indicate the elimination of the small operator as a competitor in the producing industry. But this would be a mistaken conclusion, as will appear from the facts recited in the succeeding paragraphs. If the 20 largest operators own some 60 percent of the total proved reserves it merely means that on the average each operator owns about 3 percent. The largest of these companies own only about 10 percent of the total, while the reserves of the smallest company in the list of 20 majors are of the order of 1 percent of the total.

As to the finding experience of small enterprises versus the majors, the estimates of our own engineers afford the following figures on current and recent finding results:

At the end of 1938, our engineers estimated the total proved reserves in the United States at 16.7 billion barrels (an estimate which has since been increased), including California as well as the territory in which our own companies operate. Of this total, the 20 largest producing companies in the business owned 65.26 percent, whereas all other operators owned the balance, 34.74 percent. Of the additional oil proved up in the United States by discoveries, extensions, and revisions of previous estimates in 1938, amounting to a total of about 1,200,000,000 barrels; "net, that is, after the produc-

tion of the year is taken out," the 20 major companies obtained 600,000,000 barrels, or exactly 50 percent, while all other operators obtained the remaining 50 percent. Thus, the independents improved their position during 1938, the last year for which figures are available. That is to say, the independents, with less than 35 percent of the existing reserves, found or owned 50 percent of the oil that was added to the total supply during that year. The 20 majors failed to increase their reserves in proportion to their existing ownership.

The CHAIRMAN. Might that not be explained to some extent by the fact that some of the major companies do not use their reserves as rapidly as other companies do, and that—

Mr. FARISH (interposing). No, Senator; this was dealing with new discoveries and revisions of estimates on old discoveries. It has nothing to do with production except this was a net figure.

The CHAIRMAN. This is having to do only with the additional oil.

Mr. FARISH. That is it, additional oil that went on the books as proved reserves.

The CHAIRMAN. Well, that, then, means that of the additional oil, 50 percent came from the bigger companies.

Mr. FARISH. They acquired 50 percent of the new reserves.

The CHAIRMAN. During the year 1938?

Mr. FARISH. Yes, sir.

The CHAIRMAN. The 20 major companies acquired 50 percent of the new reserves.

Mr. FARISH. That is correct, having owned 65 percent at the beginning of the year.

Mr. O'CONNELL. Mr. Farish, that wouldn't necessarily indicate a change in trend of the ultimate ownership of the reserves, would it? I should think that might be merely a reflection—

Mr. FARISH (interposing). I don't think it indicates any major trend; no, sir.

Mr. O'CONNELL. I understood you to say that since the major proportion of the new discoveries were in general made by the independents, and this figure represents discoveries of oil during that period—

Mr. FARISH (interposing). I don't think the trend is anything that extensive. There is a slight trend in the last 2 or 3 years for the independents, that is classing everybody who doesn't own 1 percent of the reserves as independents, to increase their proportion. The trend is that way at the moment.

The CHAIRMAN. It seemed to me to be striking testimony of the strength of the 20 majors to say that of the new oil brought in in 1938 they acquired 50 percent.

Mr. FARISH. That is correct. Those are the facts, Senator, as we interpret them.

Senator KING. Oil reserves?

Mr. FARISH. Reserves; yes, sir.

Senator KING. Would they maintain title to land, or merely the leases or stock in corporations?

Mr. FARISH. Mostly leases, 99 percent.

The VICE CHAIRMAN. The acquiring of reserves doesn't keep pace entirely with the discovery of oil, does it? You don't regard these

figures as indicating any basic trend because here is 50 percent of discovery, and the processes of turning it over to the major oil companies probably hasn't been consummated yet.

Mr. FARISH. Probably there wasn't any sale made, that is part of the explanation. I only cite that as an interesting fact that came to me from our statistical department since this hearing started. I thought you would be interested in it.

When the independent producer makes any complaint, his chief grievance is that conservation restricts him from exploiting and producing rapidly all the oil that he has. As indicated above, the small independent producer is likely to take a short-run viewpoint; he does not always like to play the game according to the conservation rules. This feeling, however, does not prevent numerous new producers from entering the oil business. In the State of Texas, for instance, operators of oil wells are required to file reports with the State comptroller, and I offer for the record the following certified analysis of the number of operators doing business in Texas as of January 1 for the years 1930 to 1939.

Year:	Number of Operators	Year:	Number of Operators
1930-----	1, 152	1935-----	2, 479
1931-----	1, 194	1936-----	2, 667
1932-----	1, 912	1937-----	2, 780
1933-----	2, 242	1938-----	2, 835
1934-----	2, 306	1939-----	3, 312

I would like to make an explanation for the record. The word "certified" there doesn't apply to a certified statement by the State comptroller, but a certified statement of an agent who went to the comptroller and got it off the books. There might be some misinterpretation of the word "certified." The statement no doubt is absolutely correct.

The CHAIRMAN. Would it be correct to infer from this list that in each instance for each year there were as many different ownerships as there were operators?

Mr. FARISH. What do you mean by as many different ownerships?

The CHAIRMAN. For example, in 1930 there were 1,152 operators.

Mr. FARISH. Each operator may own anywhere from one to five thousand wells.

The CHAIRMAN. Yes; but each one of these operators was a distinct individual.

Mr. FARISH. Entity.

The CHAIRMAN. Entity, that is what I mean. There is no duplication of ownership in it?

Mr. FARISH. No, sir; for instance, the Humble Oil Refining Co., is one entity, the Texas Co., the Gulf Co., Bob Jones who has two wells is another entity.

Mr. O'CONNELL. Do you happen to know the trend in Texas as an oil-producing State? It was established between 1930 and 1939, wasn't it? When was the East Texas pool brought in?

Mr. FARISH. '30.

Mr. O'CONNELL. Do you happen to know what the trend has been in Texas as an oil-producing State? Is it not a much more substantial producer?

Mr. FARISH. Yes, sir; Texas has increased materially in importance in the amount of oil found. I can't give you the exact figure, but as

an illustration the ratio is something like this. Today I think most of the geologists and engineers would agree that Texas owns between 55 and 60 percent of the reserves in the United States. Back in 1930 before the East Texas field came in it probably was a little over 30 percent. I don't vouch for the 30, but that is something of the relation.

Mr. O'CONNELL. I recall that we had one witness, I think, who testified that there were twenty-odd thousand wells in the East Texas field alone, in connection with which he indicated that four or five thousand wells would be adequate from the point of view of conservation. It occurred to me that this substantial increase in the number of operators could be explained on the basis of the East Texas development alone.

Mr. FARISH. Well, you would get that in the period between 1930 and 1932, where the jump is from 1,100 to 1,900. If you follow that list you will see that there has been an increase every year, where it has gone from 1,100 to 3,300.

In summary, the foregoing discussion shows that now as in the past there is a real opportunity for the independent business man to engage in the production of oil and that there are no discernible trends strong enough to justify the conclusion that similar opportunities will not continue in the future.

Shall I go on, sir?

The CHAIRMAN. I think we have covered that phase of it pretty well so far, unless some members of the committee desire to go into it further.

OPPORTUNITIES FOR THE INDEPENDENT IN REFINING

Mr. FARISH. In the refining branch of the industry there are more than 400 plants, but those controlled by the major companies produce a very high percentage of all the gasoline. As Dr. Wilson demonstrated so clearly, large-scale refining units requiring a substantial investment have markedly lower operating costs, obtain higher percentage yields of gasoline from a barrel of crude, and make better quality products than do many small refineries. The plants operated by independent concerns vary from small skimming plants to large, efficient units.

The basic question before your committee is whether it is possible for independents operating on any scale to exist within the refining branch of the industry as it is now organized and subject to the conditions which you have heard discussed. Essentially the complaint of the refineries is this: That periodically the prices of crude are too high or the prices of products are too low, with the consequence that the spread between the two is inadequate to cover expenses of operation and leave any return on the investment.

Let us look first to the situation of the small refiner located in an oil field. The prevailing opinion is that there is little opportunity for small refineries located in oil fields. In the past small refineries have appeared in oil fields during the period of flush production when there was a large amount of crude temporarily available at low prices.

The rapid development of fields, the inability of pipe-line companies to build fast enough to take all the crude, the desire of groups of producers to build their own refineries to serve the local market,

these have all been factors bringing about the erection of small refineries despite the manifold economic advantages of large-scale units. So long as the amount of refining of this sort is not in excess of local demand for products, such refineries may last quite a while. Customarily so many refineries of this type have been erected that the local market could not support them all, and some have eventually succumbed to the intensity of the local competition. As Dr. Wilson testified, the local market around the oil field for the byproducts, particularly fuel oil, ordinarily is limited. Fuel oil cannot stand the heavy transportation expense for long-distance shipping overland. This fact imposes a handicap on the local-field refiner, especially if he does not have up-to-date cracking equipment; but so long as he has a good nearby market for gasoline, requiring no great transportation outlay, he is able to stay in business. It is when this local situation becomes normal, when relatively low-priced crude is no longer available, that the shoe really begins to pinch. These are all fundamental facts which certainly are not the result of any concerted plan by anybody in the oil industry. It should be noted that these adverse economic facts bear equally heavily on the field refineries of majors and of independents, as the Bureau of Mines' list of shut-down refineries will indicate.

When the oil field passes the flush or quick-development stage, when pipe lines and purchasing companies have established themselves in the field, it is no longer necessary for oil producers to dispose of their oil at low prices, with the result that the opportunist refiner often finds that he can no longer get crude at low prices. Then he must either pay competitive prices for his crude supply or give up his connections. If his margin will not permit him to pay competitive prices, he has to take the second course.

Under conservation the flush stage in the development of an oil field has been eliminated. To the extent that low-price crude incident to the flush stage of production was necessary for the successful operation of such small-field refineries, conservation has restricted the opportunity for the small-business man. The influence of the flush stage on the erection of small refineries in the field has been illustrated by the recent history of Illinois, where 16 small refineries were built in the last year and one-half, and 3 more are now building. The Illinois fields are typical of interior fields, except that they happen to be located not far from large consuming markets.

On the Gulf coast, refineries have advantages over most interior field refineries because, in addition to having a large variety of nearby sources of crude available by water as well as by pipe line, they reach the world market for fuel oil in the Gulf; and cheap transportation provides access for them to many large consuming areas. It is readily apparent that such refiners avoid the handicap of transportation disadvantage to which some interior refiners have subjected themselves by building capacity beyond the requirements of their local markets.

Thus it is obvious that the refining branch of the industry at present does not offer broad opportunities to men of limited means. The independent who has a thoroughly modern plant wisely located can be successful in this business. There are developments in sight which may improve his opportunities. Compared with the types of processes now in use which yield the largest percentage of gasoline, the new catalytic cracking processes will permit a reduction in the amount of

investment per barrel of daily crude capacity; and, more important, they will yield more valuable products. Whereas under present methods a substantial amount of fuel oil is necessarily produced, under catalytic cracking very little fuel oil will have to be made. These new facts may in the future improve the position of the independent refiner.

That is a brief summary, as I look at it, on the position in the industry of the independent refiner. I will be glad to attempt to answer any questions that you want to ask.

The CHAIRMAN. Refining is almost exclusively an operation to be carried on under the corporate form, is it not?

Mr. FARISH. Yes, sir.

The CHAIRMAN. That is, a natural person with his own capital and operating with his own resources—

Mr. FARISH (interposing). I don't know of a single independently operated refinery.

The CHAIRMAN. I asked that question merely because your first sentence in that concluding paragraph, following the ordinary custom of our reference, referred to the opportunities of men in this field. Men in refining, as in most modern industry, may exercise their opportunities only through corporate organization.

Mr. FARISH. I think that is almost necessary.

The CHAIRMAN. Are there any questions on this phase?

COST OF BUILDING REFINERY

The VICE CHAIRMAN. I would like to ask a few questions, if I may, Mr. Farish. I would like to have in the record, if you have the figures or would be good enough to supply them, some estimate of what it costs to build a refinery, the smallest unit, provided with the necessary equipment for economic production of gasoline and byproducts.

Mr. FARISH. Well, I can get that up for you, I think, but that is a little difficult to answer. I will give you this story, which perhaps may be helpful. The first refinery I ever had anything to do with was one I built myself, out on a small lease in the Humble oil field. We were fortunate enough—or unfortunate enough, as it later turned out—to find an oil well, one oil well, of light-gravity oil, and I was optimistic enough—

The VICE CHAIRMAN (interposing). I didn't want to take too much of your time.

Mr. FARISH. It won't take but a minute.

Senator KING. I am interested in the story.

Mr. FARISH. This refinery bug bit me, and I thought it was foolish to sell my 35-gravity oil at 60 cents a barrel when I could refine it and get 12 cents a gallon for the gasoline, so I built me a little refinery. I took two boilers and an old gas separator and had a pond of water in it that I ran the cooling pipes through, and I started refining oil, 500 barrels a day, and the total cost of that plant was exactly, utilizing the material on the lease, \$1,300, so I started in the refining business.

Now, you can go from that all the way up to a modern unit. Just what a modern unit of 2,000 barrels or a thousand barrels capacity would cost I don't know. I can get the figures for you, but let me give you this point. Ordinarily we speak of refineries costing something of the order of \$400 a barrel through-put.

The VICE CHAIRMAN. Is that the refinery that is usually built by a big concern? Is that what you have to spend in order to get an efficient refinery?

Mr. FARISH. I think \$400 per barrel through-put, based on 10,000-barrel units, would give you a modern refinery as we look at it today. I have indicated in this paper the figures are not definite, and we don't know for sure, but in all probability the same capacity refinery, embracing the new catalytic processes, can be built for less.

The VICE CHAIRMAN. I wish you would put those in the record, if you will be good enough to get the figures.¹

Mr. FARISH. What sizes would you like to have, sir, 1,000—5,000?

The VICE CHAIRMAN. I think if you bear in mind my question, and that is: What would be the minimum expenditure to build a refinery that would produce high-grade oil?—by "minimum" I mean a plant that is big enough to produce enough material and products to justify somebody trying to operate it and sell its output.

Mr. FARISH. Then you mean something from 2,000 to 5,000 barrels.

The VICE CHAIRMAN. Probably so. That I leave to your judgment.

Mr. FARISH. May I go just a little further to get the specifications of this refinery. This is land-free, and just the cost of materials to build the refinery?

The VICE CHAIRMAN. And cost of construction, of course.

Mr. FARISH. I understand; the complete refinery, ready to run.

The VICE CHAIRMAN. Would such a refinery as you have in mind to give the figures with reference to take care of the utilization of byproducts, too?

Mr. FARISH. Well, now, wait a minute; as the old saying is, that is a horse of another color.

The VICE CHAIRMAN. We want all kinds of colored horses in this thing.

Mr. FARISH. When you spoke of a refinery, Mr. Sumners, to give you efficient production, I thought you meant gasoline, kerosene, and heater oils. Those are the three major products.

The VICE CHAIRMAN. I am asking with regard to something I am not technically familiar with.

Mr. FARISH. All I am trying to do is to find out what you mean.

The VICE CHAIRMAN. I understand that. Of course, I don't know what percentage of the value of the output of a plant in vaseline or these other byproducts they can turn out.

Mr. FARISH. I know; but you used the word—and it stumped me—"byproducts," and when you go to the utilization of byproducts of an oil refinery you cover probably some 300 different articles, all of which are subject to rerefining processes, and so on.

The VICE CHAIRMAN. I would say 100 would be enough.

Mr. FARISH. They range all the way from Mistol and Nujol on up. I think what you want—if I may be permitted to go just a little further—I think you want to know what is the investment necessary to produce high-grade gasoline, kerosene, and heater oils.

The VICE CHAIRMAN. I imagine that would be about what I am after.¹

¹ See p. 9707, *infra*, for Mr. Farish's reply to the vice chairman's question.

Mr. FARISH. There is some residue of fuel oils that we all have to dispose of. If you are going to rerefining, that involves a great many additional costs.

The VICE CHAIRMAN. What difficulty would such a plant have in acquiring the opportunity to use patented processes which its bigger competitors have, or would there be any difficulty?

Mr. FARISH. No difficulty.

The VICE CHAIRMAN. And the cost to each would be about the same, so that checks up.

Mr. FARISH. They would have to pay a royalty on the processes.

The VICE CHAIRMAN. That would be, per gallon, about what its bigger competitors would pay.

Mr. FARISH. It is generally on the same basis.

The VICE CHAIRMAN. So that would check out. They would cancel out, the differences.

Mr. FARISH. I think so, substantially; yes.

The VICE CHAIRMAN. Just one or two other questions, and I am doing it simply for the purpose of getting into the record the estimated capital of what we might call independent operators getting into the field. Staying in there, of course, is different.

Mr. FARISH. Staying in there is, of course, another question.

The VICE CHAIRMAN. That is a different question. This is a question I don't know whether I should ask or not, but if you would like to give the information about it, I think it would be good for the record; that is, where independents attempt to establish themselves for the purpose of producing a commodity and supplying local demand, are they met with, in practice, unusual competition in order to force them out of a large share of the local market?

Mr. FARISH. In my judgment, no.

The VICE CHAIRMAN. We have had a good deal of complaint that in such situations—personally, I have—large competitors will lower the price of gasoline in that area of competition to a price below that at which they sell in markets similarly related to production and marketing, and so forth.

Mr. FARISH. I have heard those complaints. In my judgment, there is nothing to them.

The VICE CHAIRMAN. What are the difficulties, and how great are they, which an independent confronts in attempting to sell his product in the general market, not having the prestige of a trade name or whatever it is.

Mr. FARISH. Do you mean, now, an independent refiner?

The VICE CHAIRMAN. Yes; that is what I mean.

Mr. FARISH. Well, I don't know that I can answer that concretely.

The VICE CHAIRMAN. That does enter pretty considerably.

Mr. FARISH. His difficulty is no greater—I will put it this way—than any other manufacturer's of any other product. If he manufactures good products, just as good as competition, I don't think he has any real difficulty within the area that he can reach. Transportation disadvantages he may suffer.

The VICE CHAIRMAN. It would seem to me that there would be some peculiar difficulties in marketing that output as against marketing the output of a manufacturer of clothing stuff, for instance, who

ordinarily sells through an established merchant and his customers would know as to the integrity of the marketer.

Mr. FARISH. Yes; but isn't it a matter of fact that there is a certain prestige and a certain loyalty that goes in every community for a local enterprise?

The VICE CHAIRMAN. Yes; insofar as local sales, but take the people coming along the highways who probably live two or three hundred miles away; they wouldn't, of course, be influenced in the same way.

Let me ask you this question: From your knowledge of the business, would it be feasible, workable, to establish standards of quality and have some intermediary agency of inspection and supervision so that the casual purchaser might have confidence in buying the commodity? That has been tried, I believe, in some States.

Mr. FARISH. I think that was pretty generally in use in the oil industry at one time.

The VICE CHAIRMAN. For what reason was it abandoned?

Mr. FARISH. I will try to give you my version of it. When I first broke into the gasoline-manufacturing business the common, accepted standard of gasoline was navy gasoline. That was a specification for gasoline that I think originated with the United States Navy, and navy gasoline was the standard. It was just the very point you are making—if it was navy gasoline it was the common acceptance by the trade. That was some time ago. I would say that was 20 years ago. Since that period the knowledge of what is good gasoline has developed and increased, and the constant pressure on the part of the oil companies in competition with each other and the automobile manufacturers to make a better and more efficient motor I think in a few years soon left navy gasoline down at the lowest scale we had.

The VICE CHAIRMAN. They didn't elevate their requirements as you developed the product?

Mr. FARISH. Well, the public demand, if you will, as expressed by the necessary quality to run automobiles. On that basis, if I may divert just a second, if I understand the theory of automobile-engine manufacture correctly, they would tell us today that if we could produce 100-octane gasoline of proper specifications as to volatility, and so on, they could make an automobile of less weight, less weight in the engine, and of more efficient capacity, and could probably sell the car at a less price than they are selling it today, particularly when it is measured on a mileage basis, so the competition in the automobile manufacture has been also a competition to make the best cars—the better the car the better grade of gasoline they would demand.

Among the oil companies they were not content, before I got in the business materially, to sell navy gasoline; they were making gasoline of better quality than navy gasoline, and the competition within the industry to make better and better gasoline has continued and is even continuing today; every few months somebody has an idea that they are going to improve their sales position and their acceptance on the part of the public by putting out a little better grade of gasoline than they have been selling, so they step up their quality, and the consequence is that all the rest of us have to step up our quality in order to meet the performance that the new gasoline puts on the market.

Senator KING. It wouldn't pay you to standardize with greater competition, better gas, and cheaper price.

Mr. FARISH. Yes, sir; and I am afraid any effort to standardize quality would be a backward step instead of a forward step.

The VICE CHAIRMAN. That is a pretty important step. Would it be feasible for standardization to advance as improved quality affects it, by reason of the improved production?

Mr. FARISH. I can't answer that; that is an administrative problem. I don't know who would set the standards or what influence would guide them in setting the standards, and so on.

The VICE CHAIRMAN. It is very difficult.

Senator KING. Aren't the technological developments not only with respect to gasoline but in all activity so great that the so-called perfected article today is very defective a year from now or a few months from now?

Mr. FARISH. I think that is very true.

Senator KING. In plastics and other testimony we have had before us that has been shown.

Mr. FARISH. That is true in everything that the public consumes.

Senator KING. What is the average cost of the average refinery of the major industry?

Mr. FARISH. Roughly stated, I think something on the order of \$400 a barrel. A 100,000-barrel refinery on that basis costs about \$40,000,000, and that, of course, is including everything that goes into it.

Senator KING. The independent refiner if he has the money could erect a refinery as cheaply as the large one.

Mr. FARISH. Yes, sir. I have stated definitely the tendency is for that cost to come down. It might even be \$300 a barrel.

Mr. HENDERSON. On this matter which Judge Sumners was pursuing, is there, in your opinion, a wide variation in the standards of gasoline sold by major companies, or, as you suggest, when one gets up to a certain standard do the others come up to it?

Mr. FARISH. Let's get a little specific. Do you mean house-brand gasoline or all gasoline?

Mr. HENDERSON. The ones that we buy—that come out of the gasoline pumps.

Mr. FARISH. All kinds come out.

Mr. HENDERSON. That is what I am trying to get at.

Mr. FARISH. I think you are speaking of house brand. I am trying to identify the question. A wide variation?

Mr. HENDERSON. Yes.

Mr. FARISH. No; I don't think there is a wide variation.

Mr. HENDERSON. Then take some small refinery in Texas that doesn't have an established name but has spent a lot of money in trying to become established with the trade. Is there much difference between the standard of his, say, high test, and the house brand?

Mr. FARISH. Well, I don't know how I can answer that.

Mr. HENDERSON. Put it this way. Do these little refiners make almost as good gas?

Mr. FARISH. Yes; if he makes as good a gasoline he is on the same equality basis as the other fellow.

Mr. HENDERSON. Then why do you spend the money establishing a house-brand name, if he is on the same equality?

Mr. FARISH. Why does anybody advertise?

Mr. HENDERSON. Because they want to get preference because of the established brand name.

Mr. FARISH. Surely.

Mr. HENDERSON. When they get that they are not on the same basis. That is the point I think the judge was making.

Mr. FARISH. I didn't get Judge Sumners that way at all.

Mr. HENDERSON. If you had grading of gasoline which would keep pace with the advance in the technology you speak of so that an independent refiner could sell, and it were well known by the public that he sold as good gas as the house brand name, would there be much of a shift in the volume of business that is done?

Mr. FARISH. It is hard to interpret that literally. My guess would be no.

Mr. HENDERSON. Do you mean that the house brand would still maintain—

Mr. FARISH (interposing). I think the house brand appeal would still command the preference of most customers.

Mr. HENDERSON. Even if it was a triple A quality?

Mr. FARISH. Even if the quality was the same. In other words, I think any man that sells any goods has got to establish his own public acceptance.

Senator KING. I have in mind, if you will pardon the interruption, two factories manufacturing blankets, the same grade, yet one of them had their own name, and people would buy it because they lived in that vicinity. One blanket was just as good as the other.

Mr. HENDERSON. On this question as between the independent refiner and the refiner of an integrated company, in which I am interested, it is very evident, then, from the testimony that the company that can establish a brand does have an advantage over the independent for the same quality of gasoline.

Mr. FARISH. You are speaking generally. Now, the independent or local manufacturer may have an advantage with his brand in his own locality, he frequently does.

Mr. HENDERSON. I think that is true.

Senator KING. Speaking of the technological development, I am told that gasoline which is used now by airplanes is of so much higher grade that it gives greater power and with the development it may be only a few years when the same high standard of efficiency, as far as the development of power goes, will be manifested in the gasoline which is used in the motorcar.

Mr. FARISH. That is a possibility, Senator, but if I may be permitted a statement, I think that is probably one of the nightmares of the oil industry, that they will be called on to furnish it. That would demand practically the reconstruction, the rebuilding, of every refinery in the United States, and even then we couldn't make all the gasoline.

Senator KING. That is to say, the technological development may make your present refineries obsolete.

Mr. FARISH. Yes. That is going on all the time. A refinery built 5 years ago, I should say, is pretty well obsolete now.

Senator KING. Because of the developments in the higher quality of gasoline that has been developed?

Mr. FARISH. Because of the development in the technological art of refining.

The VICE CHAIRMAN. That doesn't mean that you have to make a new plant; it just means you add some equipment you don't have; doesn't it?

Mr. FARISH. No. I don't believe, to put it this way, the industry today, if it were put to it, could make 100-octane gasoline to supply all of the automobiles.

The VICE CHAIRMAN. I had reference to your statement that a plant built 5 years ago is obsolete. Is that your statement?

Mr. FARISH. I think that is correct, sir.

The VICE CHAIRMAN. Does that mean if you are going to eliminate obsolescence and have a plant that will compete with somebody who puts in a new plant, that you would have to dismantle that plant and put in new machinery or put in some new equipment?

Mr. FARISH. You would have to put in new machinery, and that is one of the difficulties in this whole refinery operation.

The CHAIRMAN. What would you estimate would be the necessary annual investment of the oil industry as it is now organized for renewal of plant facilities every year?

Mr. FARISH. Complete renewal?

The CHAIRMAN. No; what you are doing.

Mr. FARISH. You mean the necessary investment?

The CHAIRMAN. Yes. You say the rate of obsolescence now is about 5 years.

Mr. FARISH. I don't know that that rate would hold constant, Senator. I haven't in mind the exact investment in refineries in the United States, but assume we refine 3,400,000 barrels a day, it is probably on the order of a billion, three, four, or five hundred million dollars, say \$1,500,000,000.

The CHAIRMAN. You spoke of a refinery to handle 100,000 barrels that would cost probably \$40,000,000 to erect.

Mr. FARISH. That is one of the recent refineries that we have been talking about.

The CHAIRMAN. That is right. Now, what would it cost to maintain that year by year?

Mr. FARISH. At efficient rate?

The CHAIRMAN. That is right, keeping up with the advance.

Mr. FARISH. I don't think I can reduce that to figures, but it is substantial. I would say on an investment of that character, we will say this refinery now would cost between \$30,000,000 and \$40,000,000, if that refinery is going to keep up with the best modern technique it would probably have to spend something in the order of 15 percent a year.

The CHAIRMAN. You would have to put that much new capital into the plant?

Mr. FARISH. Yes, sir; that is a rough guess.

The CHAIRMAN. I was very much interested in a statement which you made here that there are developments in sight which would seem to increase the opportunities of the independent refiner. You referred particularly to the development of the catalytic cracking process. Is that process open to any person or corporation which desires to use it?

Mr. FARISH. Yes, sir; it is; at what I consider very modest cost.

The CHAIRMAN. It is a patented process?

Mr. FARISH. Yes.

The CHAIRMAN. But it is an open patent?

Mr. FARISH. There are several patents, not one; there are several.

The CHAIRMAN. No restraint is exercised on the use of that patent?

Mr. FARISH. No, sir; as I understand it, none whatever.

The CHAIRMAN. What other developments are there in sight to increase the opportunities of the independent?

Mr. FARISH. That is the chief one that I have in mind. I don't know of any particular other ones. There is one point, if you will permit, right there, that I think I would like to emphasize, and that is this: There is considerable testimony in this record to the effect that pipe-line use is restricted, and that it is not free, that pipe lines are not common carriers in fact, and from my own experience, speaking now of their value to the refiner, I would like to state that as far as I am aware there is no restriction on the use of the pipe line.

The CHAIRMAN. There is a minimum tender, is there not?

Mr. FARISH. Yes; but if that minimum tender is unreasonable it could be changed. They can appeal to the I. C. C. and make it reasonable, but if anybody is going to operate a refinery, I don't think that a thousand barrels is necessary, but if it is unreasonable they can certainly change it.

The CHAIRMAN. It is your opinion that fifty to a hundred thousand is not unreasonable?

Mr. FARISH. Not for a refiner who is running a sizable refinery, but if it is he can change it to 5 or 10. May I complete, please, sir? In the State of Texas, since I think the year 1914 or 1915, I have forgotten which, we have a minimum tender of 500 barrels a day, and they take less. I know that is a fact because in 1915, operating this same little plant I described to Mr. Sumners a while ago, when my well went dry I had some production in north Texas and I got the Texas Co. to deliver me my production in north Texas at Humble to keep this little plant running, and I had about 300 barrels a day production up there. I ran the oil, put it in a tank, pumped it over, and they got a tankful and kept going. I want to register very definitely on this charge that there is a restricted use of pipe lines, there is absolutely nothing in it.

The CHAIRMAN. What is the investment that would be required to produce 50,000 tender?

Mr. FARISH. To produce it or to receive it?

The CHAIRMAN. Produce it. A refiner would have to have what investment in his plant to be able to meet the tender which is now the minimum?

Mr. FARISH. Senator, he might buy 50,000 barrels of oil from Tom, Dick, or Harry, and say to the pipe-line company, "You move that to my plant."

The CHAIRMAN. Yes; certainly.

Mr. FARISH. He would have no investment.

The CHAIRMAN. That is true.

Mr. HENDERSON. He would have to have an investment in storage tanks, would he not?

Mr. FARISH. He would have to receive it at the end of the line, at the delivery point.

The CHAIRMAN. Suppose he himself were producing it, not purchasing it, what would be his investment?

Mr. FARISH. I don't think he would have any. You are not talking about his investment in production?

The CHAIRMAN. Yes, surely.

Mr. FARISH. I don't know. That might be anything or nothing.

The CHAIRMAN. Let's put it this way. What I am trying to get at is the reasonableness of such a tender, of that rule.

Mr. FARISH. Don't misunderstand me, I am not trying to defend a 50,000-barrel tender.

The CHAIRMAN. Oh, I don't think you are.

Mr. FARISH. If a 50,000-barrel tender is too high for one man all he has to do is to go to the Interstate Commerce Commission, make out his case, and get his tender amount reduced.

The CHAIRMAN. Don't misunderstand me, I am not attacking it, I am merely trying to find out what the reasonableness of it is from your point of view, and it depends upon, as I understand you now, the fact that—

Mr. FARISH (interposing). May I put it this way? The general system of any industry, of any producer, who wants to move his oil through a pipe line to somebody else rather than the owner of the pipe line, is to ask the pipe-line company to connect up to his lease and run his oil, which they do, 100 barrels a day or 500 barrels a day, whatever the amount is, and deliver it in certain quantities at the end of the line, subject to the rules and regulations of the system, which are under supervision by the State authorities and by the I. C. C. That oil is gathered and accumulated and delivered as he orders it.

The CHAIRMAN. Then you are telling me and the committee that various statements which are made to this committee, some of them formally and some of them informally, that the pipe lines are not actually in practice operated as common carriers, are without foundation?

Mr. FARISH. To anyone who wants to use them; yes, sir, I make that statement.

The CHAIRMAN. That the pipe lines as far as your experience goes are free and open common carriers operated without restraint upon any person who offers?

Mr. FARISH. That is true; I think it is true in law and I think it is true in practice.

The CHAIRMAN. I am just trying to determine what your view would be.

Senator KING. Is there any analogy between the situation that you have described and the one that I am about to indicate? I recall that in the town in which I reside we were anxious to have a spur put in to connect with the Rio Grande Railroad in order to receive vegetables that were to be shipped. They stated if we would give assurance that there would be so many dollars' worth of business they would build the spur because it would cost several thousand dollars. When the assurance was given that we could produce sufficient freight to justify it they would build a spur but until we could do that they didn't build the spur and we had to haul our vegetables, and what not, a few miles to the place where there was a spur. Would that be something analogous to the situation?

Mr. FARISH. Yes. I will put it this way, Senator. As I understand it, this whole pipe-line transportation system is a transporta-

tion problem, and they are operated under rules and regulations. These rules and regulations are either approved by the State authority or by the I. C. C.

Mr. HENDERSON. Is that true of gasoline? What you have said from your analogy seems to refer to crude.

Mr. FARISH. I am speaking primarily of crude pipe line and I injected this because the Senator was talking about the opportunity for the small refiner.

Mr. HENDERSON. Is that true about the movement of gasoline in gasoline pipe lines?

Mr. FARISH. I am not as familiar with that subject as I am with the crude movement, but so far as I know I would say "yes."

Mr. HENDERSON. That would mean, then, that nobody in the Mid-Continent area wants to move gasoline to the Great Lakes unless he has 50,000 barrels.

Mr. FARISH. That may be; I don't know.

Mr. HENDERSON. That would be the derivation from the testimony.

Mr. FARISH. I don't know. You must understand that in moving gasoline through gasoline pipe lines it isn't as easy to move as crude for the reason that crude gathering lines extend like spider webs all over the State and all over the oil fields, and it is gathered to a central system. Gasoline usually originates in this spot and this spot and another spot, and they may be 20 or 30 or 50 miles away from any receiving station on the pipe line. Somebody has got to get the oil to the pipe line or the gasoline to the pipe line.

Mr. HENDERSON. That would indicate that only the refineries that have pretty substantial investment in the Midwest can really afford to use pipe lines.

Mr. FARISH. I didn't get the first two words.

Mr. HENDERSON. That would indicate that only the refiners in the Middle West territory that have a pretty substantial investment can use the gasoline pipe line.

Mr. FARISH. What would indicate it, their distance from the line or the 50,000-barrel tender?

Mr. HENDERSON. That minimum tender.

Mr. FARISH. I think they can get that tender reduced if they want it reduced. It is just a question of making application to the I. C. C. I don't know of anybody that has ever tried to use one of those.

The CHAIRMAN. It is now 4:30; and if it is agreeable, the committee will recess until tomorrow morning at 10:15 and resume this statement.

(Whereupon, at 4:25 p. m., a recess was taken until 10:15 a. m., the following day, Tuesday, October 24, 1939.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

TUESDAY, OCTOBER 24, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:30 a. m., pursuant to adjournment on Monday, October 23, 1939, in the Caucus Room, Senate Office Building, Senator Joseph C. O'Mahoney presiding.

Present: Senator O'Mahoney (chairman); Representative Sumners; Senator King; Representatives Williams and Reece; Messrs. Henderson, O'Connell, and Brackett.

Present also: Representatives Mapes (Michigan) and Disney (Oklahoma); Dr. Theodore Kreps, economic adviser to the committee; Willis Ballinger, representing the Federal Trade Commission; Robert McConnell, representing the Department of Commerce; Hugh Cox, W. B. Watson Snyder, F. E. Berquist, and Christopher Del Sesto, special assistants to the Attorney General; Leo Finn and Roy C. Cook, Department of Justice.

The CHAIRMAN. We were discussing pipe lines last night at the conclusion. Had you finished your discussion of it, Mr. Farish?

TESTIMONY OF WILLIAM S. FARISH, PRESIDENT, STANDARD OIL CO. (NEW JERSEY), NEW YORK, N. Y.—Resumed

Mr. FARISH. As I recall, Mr. Chairman, we had just finished the discussion of refineries, and if it is agreeable now I would like to try to answer the question that Congressman Sumners asked about the minimum refinery cost, before going on to transportation.

In Mr. Wilson's testimony¹ he said that combination units are available in sizes as small as 5,000 barrels of crude per day, and by combination units he meant the best and most efficient refinery construction that is available today. He further said, "I think this is the smallest size combination unit which would be economic to operate." Mr. Wilson's chart No. 6² estimates the cost of a 5,000-barrel combination unit to be about \$2,000,000. That is 5,000 barrels a day of crude throughput.

The VICE CHAIRMAN. That information is already in the record?

Mr. FARISH. It is in the record. That figures out about \$400 a barrel to build that type of refinery.

The VICE CHAIRMAN. If that is already in the record, unless you would like to put it in again—

¹Mr. Wilson's testimony appears in Hearings, Part 15.

²"Exhibit No. 1200," included in Hearings, Part 15, appendix, p. 8601.

Mr. FARISH (interposing). No, no; if you will pardon me just a minute, I was going to enlarge his statement briefly. That is the only purpose of repeating it. I want to state, of course, that I agree with Mr. Wilson's estimate. He calls that the smallest economic unit, and I interpret his statement to mean that he is using the word "economic" there to describe both the cost of the plant and efficiency of manufacture as to the cost of the gasoline manufactured.

I would add further that you can build a two or three thousand-barrel capacity unit that is also efficient from the point of view of manufacture, that is, as to quality and yield from the crude throughput, but your cost factor would go up in the smaller unit, so the broad use in which he uses the word "economic" would have to be narrowed in the smaller plant. It would be efficient as to turning out quality, but it would not be so efficient as to cost.

The VICE CHAIRMAN. Does that mean you haven't got enough production to distribute your overhead?

Mr. FARISH. That is correct, sir. The smaller the unit the higher certain elements of cost go.

The VICE CHAIRMAN. This small plant, the smaller plant you speak of, would that be able to take care of the byproducts which a larger plant could take care of?

Mr. FARISH. No—

The VICE CHAIRMAN (interposing). Let me put it this way. Would there result from the operation of this small unit a larger percentage of wastage or loss, whatever you want to call it, by reason of its inability to take care of the byproducts?

Mr. FARISH. No; so far as efficiency of production is concerned I think you would get about the same effect. You would make a high percentage of gasoline, a reasonable percentage of kerosene, and furnace oil, and the balance would be fuel oil, and it would be limited to those products in either one of these types of plants that he is talking about.

The VICE CHAIRMAN. Thank you very much, Mr. Farish.

Mr. FARISH. Shall I take up transportation, Mr. Chairman?

The CHAIRMAN. I think that is next in order.

TRANSPORTATION

Mr. FARISH. The small firm has little opportunity in the construction and operation of trunk pipe lines, whether for crude or gasoline, or in the operation of tankers. The average small refiner can afford to have a local gathering system if he is in the field, and in the principal oil States many independents, both producers and refiners, have pipe-line systems.

I haven't attempted to tabulate any statistics on that question, but to my own knowledge in Texas there are simply scores of such systems that are feeding individual refineries, one of them extending all the way from the Gulf coast to East Texas as an illustration, but there are practically no—there are none of the so-called independents and individual refineries that have trunk-line systems; that is, major pipe-line systems that reach into large areas.

The CHAIRMAN. Are the local lines in Texas common carriers?

Mr. FARISH. All of them are, in Texas.

The CHAIRMAN. I mean the intrastate lines.

Mr. FARISH. Yes, sir. They are all common carriers.

Large trunk pipe lines, however, involve a very large investment, and their successful operation depends upon running them at or near full capacity. Consequently, the little firm ordinarily does not go into the operation of this type of pipe line.

I might pause right there. I don't want to burden you gentlemen with talking too much about this pipe-line business.

The CHAIRMAN. I think it is one of the most interesting subjects of the whole discussion. If you would listen to the testimony you would know it is a vital question.

Mr. FARISH. I would like to bring this factor out for your consideration. The actual building and owning of a pipe-line system in itself is only, you might say, a small part of the efficient operation and success of that pipe-line system. The successful operation of a pipe-line system depends on two other factors than the owning and the operating of the pipe line itself; in most instances, certainly in those with which I am most familiar, the one I built, and headed the company, the Humble pipe-line system, which is the largest in the United States. The mere pipe-line system in itself would be something like a railroad without terminals, it would be a streak of rust, perhaps; part of the time it would be unoperated if we didn't have the two other factors working, and those two other factors are an active and aggressive producing organization at one end, producing oil to go through the pipe line, and connected up with a buying organization who is buying crude from innumerable thousands of individuals and gathering and furnishing something to push through the line.

Now the investment involved in performing that first function in addition to owning the pipe line is many times the cost of the pipe line.

On the other end, the other function, it would do no good to push the oil through it unless you had something to do with it when you got it at the other end, and that means a refinery organization backed up by a sales organization that can take it to the ultimate consumer.

The CHAIRMAN. Do you mean by that to say that a pipe-line system which should be owned and operated independently of any producing system or of any refining system would not of itself be likely to be profitable?

Mr. FARISH. I would say it could not be successful in the same sense that these pipe lines as they are operated today are successful.

The CHAIRMAN. Now, of course you are perfectly well aware of all of the demands which have been made upon Congress from time to time for so-called divorcement legislation. You have already testified before a committee in the House with respect to that. Your testimony now is an argument against divorcement, is it not?

Mr. FARISH. You can interpret it that way. Yes; certainly, I am opposed to divorcement of pipe lines. I think it would serve no useful purpose to anybody.

The CHAIRMAN. You feel that there is no basis for various arguments that have been made and the various complaints which have been offered with respect to the present management of these trunk lines?

Mr. FARISH. Yes, sir; I do.

The CHAIRMAN. I suppose you will agree that the principle that a pipe line should be a common carrier is a correct principle.

Mr. FARISH. Undoubtedly. I not only agree to it but I fought the battle in Texas for the producers to make them common carriers.

The CHAIRMAN. And do you wish us to understand that from your experience, pipe lines are operated as common carriers?

Mr. FARISH. Yes, sir.

The CHAIRMAN. And that no denial of access to the private pipe lines is made effective by methods of control?

Mr. FARISH. None that I am aware of, sir. I have stated in this paper that in 25 years I know of no case where anyone has ever been denied the use of pipe lines. I simply injected the statement I made to bring that point of view to the committee's attention which I think has been overlooked or hasn't been pointed out in this testimony.

The CHAIRMAN. But if it were true that access to a pipe line at reasonable rate were in fact denied to operators who desired to use the pipe line, then, in your judgment, that condition should be corrected?

Mr. FARISH. Well, anybody that is denied that right now has got his remedy.

The CHAIRMAN. Of course the complaint is made, Mr. Farish, that that remedy really is not an effective one, that it is more a theoretical remedy.

Mr. FARISH. Pardon me, Senator, has anyone ever made an issue of it? Do you think a railroad would dare to refuse to ship you goods? Exactly this same principle is involved.

The CHAIRMAN. I wonder about that. The charge was made here in the testimony, I think of Mr. Orvis, if not directly at least it was implied, that pipe-line rates are formulated in such a way that the small producer is actually unable to take advantage of the remedy which is afforded. The Interstate Commerce Commission has its office in Washington. The trunk-line pipe line with its resources is able to maintain its representatives here in Washington, to watch the development. When the schedule of tariffs is filed, it becomes effective unless there is a protest. This small operator out in Texas, or out in Wyoming, or out in some distant State, is at a disadvantage in dealing with such a situation—now that is the argument—so that tariffs are made and become effective without any practical method of relief on the part of the producer.

Mr. FARISH. I have heard that argument, but it makes no impression on me whatsoever, sir, because the argument is specious; the argument is not directed to facts.

The CHAIRMAN. Then do you deny that the restatement of it which I have made, from the record and not as an expression of personal opinion, of course, is not a factual restatement?

Mr. FARISH. Oh, no; I certainly do not, sir, I didn't so state.

The CHAIRMAN. I just wanted to be clear as to what you meant.

Mr. FARISH. I said I have heard the argument, but the rights to any shipper over a pipe line are the same as to any shipper over the railroad, and you must remember in most of our States, certainly in Texas, any shipper doesn't have to go further than the State capitol, or he doesn't have to go further than his telephone, to register an objection and to get consideration.

The CHAIRMAN. Do you mean a telephone objection to the Interstate Commerce Commission in Washington would be effective?

Mr. FARISH. A telephone objection to the railroad commission would be immediately effective.

The CHAIRMAN. That would be in Texas.

Mr. FARISH. Yes; I am speaking of that.

The CHAIRMAN. Of course, we are dealing with the national scene.

Mr. FARISH. My answer to your point is this, and I am speaking only of my own knowledge: So far as I know, it has never occurred to me or been brought to my knowledge of any shipper or would-be shipper being denied the use of a line.

The CHAIRMAN. Of course, we naturally will accept that statement of your experience.

Mr. FARISH. If he has complaint as to the rates, the remedy is at law. He has his appeal to the Interstate Commerce Commission, and so on. When Mr. Orvis argues about the difficulties of registering those complaints, I don't see how the industry or the pipe-line system can be blamed for that.

The CHAIRMAN. I am not trying to assess blame at all, I am merely trying to discover what the situation is, and I am impressed with an analogy in this situation to that which we were discussing yesterday with respect to the position of the small stockholder in a big national corporation. The small stockholder is ineffective to exercise any potent control over the organization of which he is a part owner, because of the physical fact that he is such a small part of the entire organization. His legal rights are complete, there can be no question about that, the doors of the court are open to him, but a small stockholder using the court to enforce his remedies is at a tremendous disadvantage because he is dealing with a preponderant power.

Now, isn't that exactly the same with respect to the small independent producer? There is a huge wall of preponderant power about him.

Mr. FARISH. The independent producer in what respects, Senator?

The CHAIRMAN. In dealing with this question of tariff rates.

Mr. FARISH. In complaining about a rate?

The CHAIRMAN. Yes; and making his complaint effective. He undoubtedly has the right to make the complaint, but the tariff is filed, sometimes there isn't sufficient time for notice, and all those things.

Mr. FARISH. The analogy is not quite accurate, if I get your statement correctly. You speak of your small stockholder being powerless to change management. The small stockholder obviously, by himself, unless he makes an awful howl, doesn't make much dent on management, but if he can get enough to go with him he frequently can make a real dent on management.

The CHAIRMAN. But there is the great problem of getting enough to go with him. You cited the case yesterday of Mr. Rockefeller in his fight to oust Mr. Stewart from the Standard of Indiana, and yet we all know, those of us who followed that struggle, that it required the exercise of every bit of influence and power that Mr. Rockefeller could bring to bear to oust Stewart from the Standard of Indiana, because the management was so powerful against the most powerful stockholder imaginable that it was a fight that took months to accomplish, isn't that the fact?

Mr. FARISH. I think that is correct; yes.

The CHAIRMAN. So when you say as a matter of legal fact that the small stockholder, if he can get enough people to go with him, has the power, you are dealing just in the formalities of the law and not in the realities, or, at least so it seems to me. I don't wish to pursue the argument.

Mr. FARISH. I don't either, because we are off the subject we are discussing.

Senator KING. The tariff rates are fixed either by the State or Interstate Commerce Commission just the same as with respect to railroads.

Mr. FARISH. Yes, sir.

Senator KING. And any person who feels the rates are too high may complain to the State or to the Interstate Commerce Commission.

Mr. FARISH. Yes, sir.

Senator KING. Is that not an analogy to the situation to which you have referred; that is, the pipe lines and railroads? I recall in my State here 2 years ago I received a wire from the producers of peaches in Brigham City¹ that the rates were too high and unless they could get their rates lowered they would not be able to ship their peaches to market. I took it up immediately with the Interstate Commerce Commission by phone and they made some adjustment under the terms of which the rates were reduced or more cars were furnished and they shipped their peaches.

The CHAIRMAN. Not everybody can get the senior Senator from Utah to go to bat for them.

Senator KING. The Senator from Wyoming would have perhaps greater power than the senior Senator from Utah. But at any rate, you have the same system with respect to pipe lines as you have with respect to railroads. You have the State and the Federal Interstate Commerce Commission and they fix the rates.

Mr. FARISH. That is correct.

Senator KING. And any person who produces oil, whether it is an independent or whether it is a major, if he thinks the rates are too high he has to pursue the course which is provided by the law and by the practice of the Interstate Commerce Commission in the Federal Government, or in the State—

Mr. FARISH (interposing). The railroad commission.

Senator KING. The railroad commission of the State.

Mr. FARISH. That is correct.

Senator KING. Have you any producing wells which are not tributary to some large pipe line?

Mr. FARISH. I don't think we have. They are tributary to some pipe line; they are not all tributary to pipe lines in which we are interested.

Senator KING. You don't fix the tariff rates.

Mr. FARISH. On some of them certainly not.

The CHAIRMAN. In any event, we are agreed on this point, that it is desirable that there should be a public authority to regulate the rates charged for pipe-line transportation so that no person is denied the use of a pipe line at a reasonable rate.

Mr. FARISH. Yes, sir; unquestionably. I think that is the law now, Senator.

¹ In Utah.

Senator KING. I suppose the rates differ with respect to the costs of the pipe line and the number of patrons which it has, that is to say, for a very costly pipe line running a very long distance with an inadequate quantity of oil to be transported through its line, the Interstate Commerce Commission or the railroad commission would fix higher rates than for pipe lines more fortunately situated.

Mr. FARISH. I think that rate question, Senator, is a tremendously big question, that is, it is an involved question and covers a large area. I will be delighted to go into it if you gentlemen want to go into the rate question on pipe lines.

Senator KING. I don't care to go into that.

Mr. FARISH. I am perfectly glad to do it, but may I make just a brief statement on it that will cover it without going into too many areas of discussion.

Pipe-line rates started out, so far as my knowledge of them goes—and I am going back to my experience in Texas when we built up in the Humble Co., as I have said, the largest pipe-line system, perhaps, in the United States so far as the volume of crude handled—very high, extremely high; they were necessarily high because there was a scarcity of pipe lines and somebody had to build them and somebody had to take the risk of building them. The State was developing oil in all directions and railroad rates were so high that you couldn't afford to ship by rail any more than you had to, and the building of pipe lines was a venturesome effort, I will put it that way; we looked at it as a venturesome effort because we were spending money doing it. I am trying to give you a brief picture that the rate structure was high; it wasn't as high as the rail structure, but it was extremely high as far as returns.

As one illustration, when the Mexia and Powell oil fields developed, our first effort in that direction was a 20,000-barrel capacity pipe line. When the Powell field came in the Mexia field was still in production, and I personally went to the railroads and asked them if they would give us a 10-cents-a-hundred rate into Texas City and we wouldn't increase the capacity of our pipe line; we didn't want to make the expenditure for the simple reason that under the method of production in those days we knew this field would blow its head off in a year or two and we would have a pipe-line capacity there and nothing to put through it. We could get no action from the railroads. They said they couldn't; they had the figures of the cost per ton-mile of moving the oil in these trainload lots, to make a fine profit out of it, and they wouldn't reduce that rate; if they reduced that rate they would have to reduce other rates. So we went on and built our pipe line to capacity to handle the oil, and I think we built that capacity up to 80,000 barrels a day. Within less than 2 years of the time we built it up to 80,000 barrels we were taking some of the line up to put it somewhere else, to another field. That line today is not moving 5,000 barrels from those two fields. So we get into the expansion of a pipe-line system, and my company had to borrow some \$50,000,000 in order to build pipe lines to make these extensions. In our deliberations in the Humble board we decided that we would not borrow the money and we wouldn't build these lines, speaking now particularly of the further extensions out into west Texas, into the Panhandle, unless we could see rates that would give us a return in about 5 years. In other words, we just calculated

cold-bloodedly that it wasn't worth the risk and we wouldn't borrow the money unless we could see the money coming back that fast.

That meant that on the whole that system in those days—this was around 1926, 1927, 1929—was probably earning a big return on the pipe-line investment.

And I couldn't give you offhand—it may have gone as high as 25 percent in one year. But my point is that pipe-line rates were high because they had to be high to get the pipe lines built, but at the same time they were tremendously lower than rail rates.

Now, since that time, and due to the development of new fields and competitive areas, pipe-line rates have gradually come down, so that as a rule, crude pipe-line rates have no bearing on rail rates. They are all so much lower that there is no relationship there.

Now, when you say that they are based on service to the lines, I don't think that follows out, because we still have the same principle of rates applying to areas that moved, we will say, forty or fifty thousand barrels a day that are now moving five. I don't know that pipe-line rates have ever gone up. They are always coming down.

Does that cover the point you had in mind?

Senator KING. Yes.

The CHAIRMAN. Would you care to make any comment upon the testimony which was given to this committee a week or so ago with respect to railroad rates and pipe-line rates in the southeastern part of the country? The suggestion was made, you may recall, that the oil companies did not want the railroad rates on the long-distance haul reduced.

Senator KING. You said southeastern. Did you mean that?

The CHAIRMAN. Yes.

Mr. FARISH. Where do you mean, Senator?

The CHAIRMAN. The testimony of Mr. Orvis, I believe; yes.

Mr. FARISH. In connection with the Pelley matter?

The CHAIRMAN. Yes.¹

Mr. FARISH. Do I care to make any statement on what phase of it?

The CHAIRMAN. The relationship between pipe-line rates and railroad rates. You have just testified that pipe-line rates are considerably lower than railroad rates. You have told us of your personal experience in trying to induce the railroads to reduce their freight rates in order that you might be saved the necessity of building a pipe line. Now, the picture which was presented—

Mr. FARISH (interposing). That was all in connection with crude.

The CHAIRMAN. Yes. Well now, the picture that was presented by this other witness to whom I am referring was that the petroleum companies were resisting the reduction of long-distance pipe-line rates—I believe on gasoline, but it was a question of pipe lines.

Mr. FARISH. Senator, so far as I recall that testimony, pipe lines were not in it at all.

The CHAIRMAN. Well, I didn't mean to imply that any pipe line was involved.

Mr. FARISH. Nor the subject of pipe lines.

The CHAIRMAN. Oh, yes; there was a question of railroad freight rates, whether the railroad freight rates should be reduced on the long-distance haul. That was my understanding, and that there was resistance to a reduction of the freight rates.

¹ See Hearings, Part 16, pp. 9067-9090.

Mr. FARISH. That had nothing to do with pipe lines. That was simply, as I understand it, a rate argument as to whether rates from the Mississippi territory, the Mississippi Valley territory, to the eastern seaboard territory, versus the local rates from the Atlantic seaboard back into the interior—

The CHAIRMAN (interposing). And there was some resistance to any reduction of the rates by the railroads.

Mr. FARISH. I don't know. I am not familiar with that case, except the testimony I heard here, and I have no comment to make for the record.

The CHAIRMAN. I was asking you if you cared to make any comment upon that situation.

Mr. FARISH. No, sir.

Shall I proceed?

The CHAIRMAN. Proceed.

Mr. FARISH. Recent technical developments, however, have opened the door once more to participation in the transportation branch by the small concern. The development of highly efficient large transport trucks provides a low cost transportation method, available to those with only limited capital. Similarly, the improvement of inland waterways has permitted the extension of barge operations, a transportation method requiring relatively small capital as compared with pipe lines and tankers.

That is all I have to say on the transportation subject.

The VICE CHAIRMAN. What is the relative cost of transportation by truck and transportation by pipe line?

Mr. FARISH. Talking now of gasoline?

The VICE CHAIRMAN. Yes. I believe you mentioned trucks as a means of cheap transportation for the small man.

Mr. FARISH. I am sorry, Mr. Congressman, I haven't those figures, but I think Mr. Pew has put those figures in the record.¹

The VICE CHAIRMAN. Probably that question is not pertinent, because as I understand it—

Mr. FARISH (interposing). If you will pardon me just a second, I am trying to get it straight. You say, What is the difference in cost?

The VICE CHAIRMAN. I say, my question doesn't seem to me, upon further consideration, to be a pertinent question, because I assume that truck transportation is a combination of volume transportation and of distribution in small quantities.

Mr. FARISH. That is correct.

The VICE CHAIRMAN. And that is the reason I withdraw my question, because I realize it is not pertinent.

Senator KING. I have no questions.

The CHAIRMAN. Have you anything to say about the repeated statements made to the committee that pipe-line profits have been used to subsidize less profitable branches of the industry, marketing, for example?

Mr. FARISH. No; I haven't anything to say on that subject, Mr. Chairman.

The CHAIRMAN. Is it or is it not a fact, in your opinion.

Mr. FARISH. Well, it is a fact that those who own pipe lines get a steady earning from pipe lines.

The CHAIRMAN. Does that enable them—

¹ Howard J. Pew, president, Sun Oil Co., whose testimony appears in Hearings, Part 14. A table submitted by Mr. Pew for his company giving costs of carriage by method of transportation appears on p. 7178 in the same volume.

Mr. FARISH (interposing). Obviously that is the one phase of our business that is on a definite fixed rate, and that has to be so by law.

The CHAIRMAN. Well, that may be—

Mr. FARISH (interposing). And in good years and in bad years a successfully operated pipe line makes an earning.

The CHAIRMAN. Well, the retailer makes his complaint to the committee and to the world in general that he is unable to operate at a profit because the integrated company, through the large profits it makes in pipe-line transportation, is able to conduct the marketing branch of the business at a loss, and so drive the independent retailer out. That is a very important phase of this whole problem, and I would like very much to have you talk about it.

Mr. FARISH. Well, it may seem so to you, but it is not to me, because—

The CHAIRMAN (interposing). Well, of course, I am only reflecting what the retailer says. He thinks it is important to him.

Mr. FARISH. So I have heard him say, but whom do these companies that operate these pipe lines make the money from? They are common carriers, but the common carrier use of these pipe lines, if we had the figures before us—I can only estimate or guess at them—the common-carrier service of all these pipe lines, is a service that somebody else pays for. It is probably not over 5 percent, so as I gave you an illustration a while ago, the ownership and operation of a pipe line is one thing, but somebody has to get the oil together on one end to push it through and use it on the other end.

Now, that somebody is usually the somebody that owns the pipe line, and it is like taking money out of the right hand pocket to put it in the left hand pocket.

The CHAIRMAN. That is perfectly clear.

Mr. FARISH. And there is no outside profit that comes to that organization, as I see it; so how you could subsidize yourself by moving money from one pocket to another is a little disturbing to my way of thinking.

The CHAIRMAN. Now, Mr. Farish, is that really a realistic concept? To allow a marketing branch of an industry to operate at a loss while the transportation and producing branches of the same integrated company are operating at a profit is not at all like an individual swapping his money from one pocket to another, because it has an effect upon literally thousands of retailers who have no opportunity to produce and no opportunity to transport.

Mr. FARISH. Senator, may I ask a question?

The CHAIRMAN. Surely.

Mr. FARISH. Is the case closed to your mind?

The CHAIRMAN. Not at all, because I ask these questions—

Mr. FARISH (interposing). I haven't asked the question. Is the case closed to your mind that the marketing business is operated at a loss?

The CHAIRMAN. Not at all.

Mr. FARISH. Your statement assumes it.

The CHAIRMAN. I have asked you, on the basis of evidence that was presented to this committee: I have in mind at the moment a chart which was called to the attention of the committee by Mr. Hadlick¹

¹ Exhibits 1 and 2 in "Exhibit No. 1211," included in Hearings, Part 16.

which was taken not from any information gathered by the retailers, but from some trade newspaper, and my recollection is that the information came from the so-called major or integrated companies. Now this chart showed big profits in production, big profits in transportation, losses in refining and marketing. Now, the retailer complains that he is unable to operate even at a living wage, and we have had retailers here, some of whom were critical of the big companies and some of whom were not critical of the big companies, all of them saying that they had to get along on less than \$1,000 a year net as an income.

Now, those are the men who come to this committee and say, "The retailing business cannot be carried on profitably because the large integrated companies use the profits which they make in production and which they make in transportation so to reduce the operating costs of retailing that we can't compete." Now that is the story that I would like to have explained from the point of view of the head of the largest integrated company in this industry. That is all I am seeking. My mind isn't closed at all.

Mr. FARISH. You are asking me, now, to put myself in the position of the little fellow who is making that complaint.

The CHAIRMAN. No; I am asking you to put yourself in the place of the president of the Standard Oil Co. and tell me about it from your point of view.

Mr. FARISH. From my point of view, Mr. Chairman, if you are going to listen to the complaints of everybody who has a grouch and everybody who has something to complain about, you will spend the rest of your life listening to complaints. They are bound to exist and we are bound to have them.

The CHAIRMAN. You don't mean to imply that the door should be closed to complaints, no matter what source they come from?

Mr. FARISH. No, sir; I certainly do not. We listen to all of them that come to us, and I assume the Federal Trade listens to all that come to them.

The CHAIRMAN. And this committee is listening to the complaints that come here.

Mr. FARISH. The only point I make is that if we are going to emphasize the situation by just emphasizing the complaints that come to us, we make no progress in understanding each other.

The CHAIRMAN. I am giving you an opportunity to answer the complaints.

Mr. FARISH. We answer every complaint that comes to us direct.

The CHAIRMAN. Am I to understand, then, that you don't care to go into this phase of the matter?

Mr. FARISH. I am perfectly willing, sir, to give you my knowledge of my own business, and our policy and the results of our operating operations in marketing, if that will be helpful.

The VICE CHAIRMAN. My impression, as one member of the committee—I haven't been able to attend constantly—is that there was substantial support of the charge that the major companies extracted their profit before they got to the retailers, and used some of the profits extracted before they reached the point of the retailer to put out of the picture the small distributor. I mean that is in this record in a substantial way, I think. That is my impression.

Mr. FARISH. Well, I am thoroughly familiar with those charges and that complaint. All I can say on that score is that we do operate our marketing business at a profit, and we don't put anybody out of business. And so far as I can interpret the record, the number of people that are put out, the merchants, and everybody that jobs petroleum or retails petroleum is a merchant, and if you could gather the statistics, which I am unable to gather, I would certainly conclude that the number of failures, the number of people, to use the language used, put out of business in the petroleum industry, is not 5 percent of the failures in the average industrial merchants of the United States.

The VICE CHAIRMAN. You mean by your statement, Mr. Farish, that under your system of bookkeeping, you charge to the marketing ends of your business gasoline and whatever products are sold at the same price that the independent can buy, and you do not lose money in that transaction.

Mr. FARISH. I want to answer yes to that statement.

Senator KING. I have been impressed with the testimony, and from my observation, there are too many service stations. Take in this city, you have four stations on four corners, and wherever you go you find a multiplicity of service stations, and it seems to me that many of those stations inevitably must fail to make any returns to the owner or the operator. And I don't know how you are going to give a greater return to the service station man when there is such a multitude of them, just the same as the corner grocery. You go into this city and go into any city and you find hundreds and hundreds of grocery stores, little merchandising stores, many of which fail, a very greater number than perhaps the economics of the situation warrant. I can understand, with a great number of retailers, and I am using the word "retailer" here of petroleum in connection with the service station—I can understand with the great number there are bound to be failures, or at least the profits are so small to the retailer, with the great cost of buying a corner, putting up a plant and operating it, that some of them make very small, if any returns. I don't know how you are going to guard against that.

Mr. FARISH. I don't think there is any question, Senator, but that the people who are selling gasoline in the United States, some 360,000 to nearly 400,000 various outlets of one kind or another, a large percentage of them are only making a living out of that operation. They are not making a substantial earning or handsome profit. The reason for that is as you stated. Probably in some areas there are too many of them, some of them are badly located, some of them make no public appeal, they don't draw trade, they can't draw customers, and some of them are so managed that nobody wants to trade with them for various and sundry reasons—location, type of service they give, and so on.

The CHAIRMAN. Of course, the statement was also made, Mr. Farish, that many of the major companies have competed with one another in the erection of a multiplicity of stations more than the market really can support, and that that too contributes toward this result of which the so-called independent retailer complains.

Mr. FARISH. That is possible. I doubt whether you could find ultimate justification for the building of every filling station by a major company. They make mistakes, Mr. Chairman.

The CHAIRMAN. You were good enough to indicate that you would discuss this from the point of view of your own experience. I have now before me a copy of the hearings which were held in the House in May and June of this year on H. R. 2318, a bill to divorce the pipe lines, and I find that in your testimony on page 276 of the record you inserted a table which purported to show the earnings of the marketing departments of the Standard of New Jersey, the Standard of Louisiana, the Standard of Pennsylvania, and the Colonial Beacon Oil Co., and from this statement it appears that the Colonial Beacon Oil Co. lost money in 1930, '31, '32, '33, '34, '35, '36, and '37.

These losses ranged from \$860,000 in 1930 to \$3,191,000 in 1936, and then the table showed that for the total of all four of the companies there was a loss of \$3,700,000 in 1930, a loss of \$1,500,000 in 1932, a loss of \$5,829,000 in 1933, a loss of \$2,758,000 in 1934, and a loss of \$1,541,000 in 1935.

Mr. FARISH. Will you read on, please, sir?

The CHAIRMAN. Pardon me?

Mr. FARISH. Will you read on, the profit?

The CHAIRMAN. A profit of \$450,000 in 1936 and of \$1,941,000 in 1937. I will go back to 1928, when there was a profit of \$10,977,000 in 1928, of the total.

Mr. FARISH. I can state for the record we also made a profit in our total operations in 1938, and so far this year a profit of somewhere between five and six million dollars for the 6 months of the year 1939.

The CHAIRMAN. When you say the total operations, you mean the total marketing operations of these four companies.

Mr. FARISH. Of these four companies, the same list you are reading, so that record would show, if I may carry on just a second, that in the last 4 years, 1936, 1937, 1938, and the first six months of 1939, we are making a profit in our marketing business.

The CHAIRMAN. Is that the retail marketing alone?

Mr. FARISH. That is the direct marketing, the wholesale marketing. We don't do any retail marketing of gasoline.

The CHAIRMAN. Then, is this separate and distinct from the filling station on the corner?

Mr. FARISH. Yes, sir.

The CHAIRMAN. You don't do any more of that?

Mr. FARISH. We have, I think, five in our whole organization.

The CHAIRMAN. What about Colonial Beacon Oil Co.?

Mr. FARISH. It is the same.

The CHAIRMAN. That does not operate any filling stations?

Mr. FARISH. No, sir.

The CHAIRMAN. These filling stations are all leased?

Mr. FARISH. All owner-leased except five.

The CHAIRMAN. With respect to all four of these companies?

Mr. FARISH. Yes, sir.

The CHAIRMAN. If you were to make a comparable table for these years for all of the companies, showing profit or loss for production and profit or loss for transportation, would any loss figures appear in the last total column? Mr. Farish has presented a table giving the earnings of four companies which are associated with the Standard Oil Co. (New Jersey).

Mr. FARISH. In the marketing field.

The CHAIRMAN. Now, my question is, What would be the result as to profit or loss if a comparable table were prepared which would reflect the earnings of all branches of the industry, of these companies?

Mr. FARISH. I can't answer that. I could answer it in this way. The Colonial Beacon is not a producer, the Standard of Pennsylvania is not a producer.

The CHAIRMAN. But it is a subsidiary of the holding company, which is the Standard Oil Co. (N. J.).

Mr. FARISH. But you said what would each of these companies show operating in all the branches.

The CHAIRMAN. No, no; you misunderstood me; I didn't mean that if I said it. I mean what would be the figure in the last column showing the total. You have made a total for these four separate entities, these four separate corporate entities. Now, you could make the same—

Mr. FARISH (interposing). In their marketing operations.

The CHAIRMAN. All right. You could make the same total or a similar total for the various entities which are gathered together under the holding company to handle all branches of the industry, could you not?

Mr. FARISH. I could do it with reasonable accuracy and certain assumptions.

The CHAIRMAN. Would the last column show any losses at all?

Mr. FARISH. No; I would say not.

COMPLAINTS OF THE RETAILER

The CHAIRMAN. There is the point, Mr. Farish, the whole point that these retailers make; they say that when you take all branches of the industry of an integrated company you make profit and that enables you to invade the retail field and destroy the smaller retailer. Now, do you have any comment to make on that?

Mr. FARISH. I think that is a far-fetched point of view, Mr. Chairman. I think that same subject has been brought up and argued with a good many different witnesses since these hearings started, and you get into the question of integration, you get into this question of—

The CHAIRMAN (interposing). Of course, that is the question. There can be no doubt of your right to do this, your legal right. All we are talking about here from the point of view of the retailer, again let me say—and I am asking you these questions merely in order that there may be on this record a complete factual picture of what the situation is—is that the retailer complains that the integrated company by reason of the fact that it permits profits in production and profits in transportation to be used to finance losses in marketing, makes a condition that makes it impossible for the retailer to operate at a living wage.

Mr. FARISH. Well, I don't think that is true.

The CHAIRMAN. To what do you ascribe the fact that the retailers make so universal a complaint about losses?

Mr. FARISH. I deny, if you please, I deny that the retailers make so universal a complaint, first.

The CHAIRMAN. Well, the complaint, of course—

Mr. FARISH (interposing). My feeling in this situation is that the complaints you have are from a very small minority in the retail field as well as in the jobbing field, that you are giving undue consideration to the number of complaints and the character of complaints that you get.

The CHAIRMAN. Of course, all my questions this morning are based upon your testimony of certain losses in the marketing field, and I may say to you, though it is not of record before this committee, that I attended the meeting of the National Petroleum Association at Atlantic City within the month and there I heard Mr. Paul Ryan, head of a very large refining company, talk about the competition of the majors with one another for profitless gallonage, implying that from his point of view even the majors were engaging in marketing at a loss, to their own disadvantage.

Mr. FARISH. All of this that you are describing and the basis of all these complaints that you hear finally go back in my mind to the effects of competition.

The CHAIRMAN. That may very easily be. Now let's develop that.

Mr. FARISH. Whether there is a remedy for that I don't know. Some people think the remedy is price fixing; to some people the remedy is a guaranteed margin so that anybody who goes into business can have an assured living and an assured profit, the Government will take care of them, and all they have to do is to open up a business establishment and they may be guaranteed a profit. Now, my own approach to that is that that is "smoking the pipe"; that is just dreaming; that kind of thing is not practical. Senator, I have the feeling that in any competitive set-up that you may have, whether it is in the retail market, the grocery, the drug store, whatever you have, you are going to have mistakes made, you are going to have some of them that can't make a living. The Constitution says that God created us all equal, but I think there are some doubts about it, and the ability of a man to work and the accomplishment that he can show for that work differs materially with every individual and every business enterprise that is started, whether it is a peanut stand or a railroad. Now, I just can't see how we can sit here and discuss the functions of this industry in the national economy and attempt to solve the individual problem of the individual merchant who has been hurt or can't make a living or can't make the grade.

The CHAIRMAN. Of course, if we don't do it then it is going to be done not by the democratic processes through the constitutional forms of government, but it is going to be done by those who happen to sit in positions of power within the industry.

Mr. FARISH. I beg your pardon. If it is going to be done at all it is going to be done by a Hitler form of government and not by—

The VICE CHAIRMAN (interposing). If it is not done by some democratic processes it will be done by some Hitler form of government. Isn't that about what we are up against? In other words, if we can't preserve a democracy in opportunity how are we going to preserve a democracy in government? That is what we are talking about.

Mr. FARISH. I am not denying for a minute but that we have a democracy of opportunity.

The VICE CHAIRMAN. We don't believe you have in this industry according to your testimony, and that is what we are trying to get

cleared up. I mean for myself. You made some very good explanations about this standardization yesterday, that gave me some good information and helped to straighten a few things out. I don't know, I may have to think about that a little more, for instance, but it strikes me now, let's be candid about it, if the people who were marketing for the major companies were having to depend upon what they received in profit in their sales—so it is in the record here—they would have gone out of business under the ordinary influence of competition because they couldn't continue to have lost three or four hundred thousand dollars or a million dollars during those years. That is the point with us. I mean I am like the chairman, I am just trying to find out about this.

Mr. FARISH. Pardon me, Mr. Sumners. Do you mean that no business can afford to take a loss?

The VICE CHAIRMAN. No; I don't mean that.

Mr. FARISH. If my understanding of industrial America is anything like correct, it is a series of profits and losses and frequently more losses than profits.

The VICE CHAIRMAN. No; that isn't what I mean.

Mr. FARISH. If we had a system—pardon me just a second—of price fixing, if you will, that was rigid enough in the oil industry so that every branch of the industry, everybody in it, made a satisfactory profit, the Government would take over that business so quick that it would cease to be an independent business.

The CHAIRMAN. May I interrupt to say that nobody here is talking about price fixing, and I just don't want the record to give the reflection that the witness is answering any suggestion upon the part of any members of the committee that there should be price fixing by the Government.

The VICE CHAIRMAN. I don't know whether you gentlemen are interested in what the committee thinks about this thing or not, but we are. We may have to propose some legislation.

Mr. FARISH. Well these losses that you speak of, Senator, you only read the table, and I attempted before the Harrington committee to deal as frankly as I knew how with the subject. I don't want to burden this record, but I would like to make that discussion a part of this record, now that the subject has been brought up, beginning with the first paragraph on page 276, and Mr. Hall¹ suggests that I ought to read it into the record. I would be glad to do that, if you care to have it.

The CHAIRMAN. It would be quite agreeable to me, because, as I said, I was about to read a portion of it myself in order to illuminate this subject, but before that is done Judge Sumners indicated that he had one or two questions.

Mr. FARISH. Oh, I beg your pardon.

The VICE CHAIRMAN. Here is what interests me, that with the strong position which the big companies had in the retail market and their ability in the first instance to establish the retail price, if they were selling at a loss during those years, what chance would the little man have to stay in the business?

Mr. FARISH. May I answer that?

The VICE CHAIRMAN. That is what I want you to do. I want it straightened out in my own mind.

¹ Edwin S. Hall, general counsel, Standard Oil Co. of New Jersey.

Mr. FARISH. In the first place, the big companies are not in the retail business.

The VICE CHAIRMAN. Now, that answers it?

Mr. FARISH. I think that answers it.

The VICE CHAIRMAN. Now, then, one other question. You mean at the present?

Mr. FARISH. Yes; and for several years.

The VICE CHAIRMAN. They were not in the retail business during the years covered by the statistics that have been read into the record?

Mr. FARISH. Part of those years.

The VICE CHAIRMAN. But the policy has been for them to go out of the business.

Mr. FARISH. Yes; in the last 4 years I would say.

FILLING STATION LEASES

The VICE CHAIRMAN. Now, when they go out of business and lease those plants of theirs, is it the custom now to require that the lessee shall deal only in the products of the company that owns the property that is leased?

Mr. FARISH. Not in our company; no, sir.

The VICE CHAIRMAN. You just make a straight lease?

Mr. FARISH. A straight lease. But, obviously, that least has taken on a basis that he wants to handle our products, but there is no prohibition in the lease.

The VICE CHAIRMAN. He wouldn't last very long, would he, if he got to selling the other fellow's product?

Mr. FARISH. He has a year's contract; he has a year's lease, and many of them do sell lubricating oils and other accessories that we don't sell.

The VICE CHAIRMAN. And you sell to the independent man on the same basis that you sell to him?

Mr. FARISH. Yes, sir.

The CHAIRMAN. Could we say then, that testifying before the Temporary National Economic Committee, the president of the Standard Oil Co. (New Jersey) said today that no lessee of that company is under any obligation to sell only the products of the Standard Co. at his station, and that at the expiration of his lease, if he did sell such products, he would not be in any danger of cancellation?

Mr. FARISH. Please separate your question. If you leave off the last phrase, the answer is yes.

The CHAIRMAN. That is what I thought it would be.

Mr. FARISH. If you add the last phrase, I think it might be different.

The CHAIRMAN. I think that is a very frank answer, Mr. Farish, and it goes to the heart of the control of retailing. That is exactly the complaint that the retailers made—that if they exercised their independent judgment to sell products other than those furnished by the lessor company, their leases would be in danger, and you tell us that is the fact.

Mr. FARISH. I think that is the fact, certainly. If you will permit me, I don't see anything wrong with that, morally wrong with that.

The CHAIRMAN. I am not trying to imply anything wrong. I am merely trying to get the facts.

Mr. FARISH. There is nothing unfair about it. The number of owner's stations that are leased out is so relatively small a number of the total that it is not a serious question; it doesn't affect the economics of the retailing of gasoline in this country.

The CHAIRMAN. The greatest difficulty I have as chairman of this committee in examining witnesses, and in studying the facts which are presented, is to convince the witnesses that these questions are not intended to imply any wrongdoing.

Mr. FARISH. Oh, no, no; I am not looking for trouble either, Mr. Chairman.

The CHAIRMAN. You are not on the defensive here. We are merely trying to find out the facts about a very important public industry.

Mr. FARISH. Certainly.

Senator KING. I would like to ask a question. Were you through, Judge Sumners?

The VICE CHAIRMAN. Yes.

Senator KING. How many stations sell the products of your companies?

Mr. FARISH. How many—

Senator KING. How many of these filling stations?

Mr. FARISH. How many filling station outlets do we sell to? Approximately 25,000.

Senator KING. What proportion of that 25,000 are owned by or leased by your company?

Mr. FARISH. That are owned and leased by our company—a little over 2,000, 2,200, I think it is, or twenty-one-hundred-and-something.

Senator KING. So it would be two twenty-fifths.

Mr. FARISH. Yes, sir.

Senator KING. And those persons who have their own filling stations, not yours, either by ownership or lease, they are at liberty to sell to whom they please, and if they care to buy from you they may, or if they care to buy from some other oil company they may do so.

Mr. FARISH. Certainly.

The CHAIRMAN. Until the end of the year.

Mr. FARISH. He is talking about another group now, sir, not the 2,200.

Senator KING. I am speaking of the remainder of the 25,000, not the 2,200.

Mr. FARISH. He is talking about the 23,000.

Senator KING. And as I understand you now, those that have been leased by you, you do own them in fee, that is, the property upon which they stand.

Mr. FARISH. Yes, sir; we own them in fee or have a long-time lease on them.

Senator KING. Have you disposed of any you formerly owned or had a long-time lease on?

Mr. FARISH. I presume we have disposed of a few or abandoned a few where roads have changed and made the location poor.

Mr. BALLINGER. Have you any idea of the total gallonage taken by the 2,200 stations in comparison with the gallonage taken by the others?

Mr. FARISH. I couldn't give it exactly, but my assumption, Mr. Ballinger, would be that for most stations it is larger than the others. That would be obvious, because naturally the various or-

ganizations that have built up our stations have picked desirable locations and they probably do considerably more business than the average station.

Mr. BALLINGER. In other words, with the station very important, it is likely to come under a lease; it is likely to be under a lease.

Mr. FARISH. I didn't get that.

Mr. BALLINGER. When the filling station occupies a very important area for sale, it is likely to come under a lease, and these other stations, maybe little pee-wee stations, may not be selling very much, but the key stations may be under lease.

Mr. FARISH. You mean we may own them?

Mr. BALLINGER. Or you will lease them; they are under lease to you, aren't they?

Mr. FARISH. We are talking about stations that we have built and own, and that we lease out to dealers, in comparison with the stations that others have built. My point was that the stations we have built ourselves in all probability are larger volume stations than the other stations.

The VICE CHAIRMAN. Mr. Farish, do you keep any account as to the rental returns on these stations in proportion to the investment in them?

Mr. FARISH. Yes, sir.

The VICE CHAIRMAN. How does that run?

Mr. FARISH. In the black; that is about all I can say for that. In other words, we get back from the revenue of these stations all of our costs, overhead, taxes, and improvements, and some small profit.

The VICE CHAIRMAN. Does it result in a—

Mr. FARISH (interposing). I will put it this way: It is not a profitable piece of property, from an ownership point of view.

The VICE CHAIRMAN. From the standpoint of the operator, is he able to rent your station at a cheaper price than his competitor is able to—

Mr. FARISH (interposing). Build and own a station?

The VICE CHAIRMAN. Yes; that is right.

Mr. FARISH. I don't know. You would have to look at each station in each location to get that. I dare say we have stations, though, that rent all the way from practically nothing to a cent and a half a gallon throughout, maybe 2 cents in a few instances of particularly well-located and profitable stations, and that rent is a matter of trading between our sales department and the merchant who is leasing the station.

The VICE CHAIRMAN. We have had some testimony to the effect that concessions were made to those who handled your commodities exclusively, to the competitive disadvantage of his neighbor across the street who had to build his own place, and that is the reason why I was asking the question.

Mr. FARISH. I couldn't answer that, but in the give and take of trading and bargaining on these rentals, that may be true in some cases. I wouldn't say that it wasn't.

The VICE CHAIRMAN. But not designedly true.

Mr. FARISH. What is that?

The VICE CHAIRMAN. Not designedly true as a matter of policy.

Mr. FARISH. No, sir; it is a question of trading with the lessee or the merchant who has the station.

Senator KING. Is consent given to insert in the record what he has before him?

The CHAIRMAN. Mr. Farish is about to read a part of that testimony.

Mr. FARISH. Shall I read it? It is an explanation of these losses.

The CHAIRMAN. I was going to read part of it myself and I am glad to have you do that.

Mr. FARISH. Having introduced the table, it leaves a little vacuum if I don't give the explanation I gave before that committee.

Mr. Cox. Before you read that, there is one question I thought I might ask that may be covered in the text. I assume from something you said a moment ago that the Colonial Beacon Oil Co. and the Standard Oil Co. of Pennsylvania were primarily marketing companies; is that right?

Mr. FARISH. Correct; Beacon has a refinery.

Mr. Cox. Beacon has a refinery.

Mr. FARISH. Standard Oil of Pennsylvania is wholly a marketing company.

Mr. Cox. And generally speaking Colonial Beacon Oil Co. is primarily a marketing company.

Mr. FARISH. I think that is correct, sir.

Mr. Cox. And that wouldn't be true to the same extent of Standard Oil of New Jersey which is a more completely integrated company.

Mr. FARISH. It has refining and marketing.

Mr. Cox. And Standard Oil Co. of Louisiana has—

Mr. FARISH. Refinery production, pipe line and marketing.

Mr. Cox. Standard Oil Co. of New Jersey has no production and no pipe line?

Mr. FARISH. I think that is correct.

Mr. Cox. And no wholly owned subsidiaries that operate pipe lines that are used by the company?

Mr. FARISH. Well, let me see. Yes, they do; they own the stock of the Carter Oil Co. and the Tuscarora Pipeline Co.

Mr. Cox. As a generalization, somewhat rough perhaps but roughly accurate, would it be fair to say that the Standard Oil Co. of New Jersey and the Standard Oil Co. of Louisiana are more completely integrated than the Standard Oil Co. of Pennsylvania and Colonial Beacon Oil Co.?

Mr. FARISH. That is correct.

PROFITS AND LOSSES IN MARKETING BY STANDARD OIL CO.

Mr. FARISH. In the first place, speaking for the Standard Oil Co. (New Jersey), let me say that we do not operate marketing at a loss. The following table, which I ask permission to enter in the record, shows the marketing profits and losses of our four domestic marketing subsidiaries for each year from 1928 through 1937.

I won't read the table. Senator O'Mahoney has read most of it but I will pass it on for inclusion in the record.

(The table referred to follows) :

	Standard Oil Co. of New Jersey	Standard Oil Co. of Louisiana	Standard Oil Co. of Pennsyl- vania	Colonial Beacon Oil Co.	Total
1928.....	\$9,862,480	\$1,115,424	(1)	(2)	\$10,977,904
1929.....	8,641,895	1,188,348	\$680,597	(2)	6,772,949
1930.....	3,451,540	\$4,217,994	\$819,041	\$2,133,657	\$3,719,062
1931.....	6,532,242	\$1,741,914	\$361,073	\$860,804	568,450
1932.....	3,734,144	\$3,199,716	\$380,251	\$1,668,092	\$1,513,915
1933.....	967,607	\$2,609,879	\$1,771,147	\$2,415,747	\$5,829,166
1934.....	3,190,274	\$2,261,990	\$1,138,686	\$2,547,762	\$2,758,164
1935.....	4,340,688	\$1,726,350	\$330,197	\$3,068,376	\$1,541,268
1936.....	3,583,654	\$342,800	\$284,000	\$3,191,600	450,854
1937.....	3,221,410	\$662,000	\$967,200	\$974,800	1,941,410

¹ Organized June 29, 1928. Departmental earnings not available.

² Not available.

³ Loss

Mr. FARISH. Note from the figures shown in the left-hand column of this exhibit that our principal marketing subsidiary, the Standard Oil Co. of New Jersey, with territory covering the Middle Atlantic States, earned a profit in every single year of the period, including the depression years.

The CHAIRMAN. And that company, of course, is a fully integrated company.

Mr. FARISH. But this is marketing department of that company, Mr. Chairman.

The CHAIRMAN. Yes; that is true.

Mr. FARISH. And the distinction is made there because the Standard Oil Co. of New Jersey owns the old marketing area that was left with the Standard Oil Co. (New Jersey) in the dissolution decree. That includes the States of New Jersey, Maryland, Delaware, West Virginia, Virginia, North and South Carolina, and the District of Columbia.

The CHAIRMAN. Did I understand that you own that distributing area?

Mr. FARISH. Operated in that area; that it came in the dissolution decree of 1911, that the marketing properties in that area were left with the Standard Oil Co. of New Jersey.

The CHAIRMAN. It is true, is it not, that there is no longer any division of territory among the units of the old Standard Co.?

Mr. FARISH. Yes, sir; that is true; there never was any division of units, except a division of properties as were covered in the decree.

The CHAIRMAN. And there never was any understanding that one company would not enter the other field?

Mr. FARISH. Not to my knowledge; certainly not in my day.

The Standard Oil Co. of Louisiana had a profit in its marketing department in 1928 and 1929, but did not return to black figures thereafter until 1925. A new management, charged with the responsibility for reducing marketing costs, was installed during the period, and the improvement in the company's marketing profit and loss statement was primarily the result of lower costs.

The records of the two remaining subsidiaries, the Colonial Beacon Oil Co. and the Standard Oil Co. of Pennsylvania, on the surface

give substance to the charge of consistently unprofitable marketing activities. But there is in the case of each of these companies a compelling line of reasoning in justification of the record.

After the dissolution decree the Standard Oil Co. (New Jersey) was left with a very large share of the old company's refining capacity, much of which was concentrated in New York Harbor. It naturally did not have marketing facilities for its output and sought as rapidly as possible to secure large outlets for its production. At hand was the then Standard Oil Co. of New York, with limited refining capacity and extensive outlets in New York and New England. At one time sales of gasoline by the Standard Oil Co. (New Jersey) to the Standard Oil Co. of New York were as high as 11,000,000 barrels a year. But as time went on the Standard Oil Co. of New York, like most of the important companies in the industry, sought to make itself a well-rounded unit by acquiring crude resources and expanding its refining capacity. The management of the Standard Oil Co. (New Jersey) needing outlets badly in New York and New England to replace its decreasing business with the Standard Oil Co. of New York, had the alternatives of invading the territory with new outlets or buying an established marketing organization. Either alternative carried with it the possibility of substantial losses for a period of years. Seldom can a company in any industry break into a new territory already well developed by important competitors without a considerable period of substantial losses.

We elected to buy an established company, the Colonial Beacon Oil Co. Frankly, gentlemen, on the basis of hindsight, it now appears that we made a mistake, or at least that we paid too much for it and have had high interest and depreciation expenses as a result. The company had a substantial number of outlets but many of its leases were at extremely high rentals, and the acceptance of its brands on the part of the public proved not as satisfactory as we had thought. Furthermore, we subsequently found that we were at a transportation disadvantage in a large part of the territory because of gasoline shipments from refineries in the Gulf. During the past few years our efforts to get this company in the black have been handicapped by the low prices for domestic heating oils, which are an unusually important part of this company's business.

In Pennsylvania, on the other hand, the company sought additional outlets for the output of its refineries not by the purchase of an established company but by the organization of a new unit. It was necessary for the Standard Oil Co. of Pennsylvania to expend large sums to break into a territory already served by many companies. One important element in the decision to go into the Pennsylvania territory was the desire to make use of the Tuscarora pipe line. This pipe line, which represented a substantial capital investment, had lost its usefulness as a crude-oil carrier through changes in the location of the crude resources and through developments in the economics of refinery location. Nevertheless, there were certain substantial fixed costs, such as taxes, which we continued to incur so long as the pipe line was in existence. Therefore, it was a question either of scrapping the pipe line, which incidentally would have lowered the income of the State of Pennsylvania, or of seeking to utilize this equipment in such a way as to justify the continued burden of

these costs. We elected the second alternative, made some additional capital outlays, and converted the Tuscarora pipe line to a gasoline carrier moving gasoline westward.

The CHAIRMAN. The rest of the statement has no reference to marketing, has it?

Mr. FARISH. I think that is all right. We will stop right there.

I have here a memorandum that is just a reminder (I think it is in the record) that so far as this table is concerned, Mr. Cox, there is no part of the integrated efforts of the Delaware and Louisiana in this table.¹

Mr. Cox. I assume it is set up on a segregated basis.

Mr. FARISH. That is what I thought.

Mr. Cox. Mr. Farish, that raises another consideration in my mind which I should like to suggest to you. We asked your companies, among others, to submit certain figures broken down between four branches of the industry as to investment and income, and we were informed by Mr. Hall² that it was impossible for you to give those to us. In view of this testimony of yours this morning, and of this table, I wonder if you would care to reconsider your position on that matter and give the committee a break-down as between the four branches of the industry at some future time.

Mr. FARISH. We can give you a break-down, yes, sir; but necessarily, as between marketing and manufacturing, there would have to be a considerable give-and-take or leeway. What we have attempted to do, if I may explain just briefly, in giving these marketing figures, is to give our current practice within the organization at which the transfer is made from the refinery to sales, and that basis varies a bit over the years. But in recent years that basis is as near to the going market as we can interpret. It hasn't much to do with the cost, but it gives us a measure of how the marketing department is going in comparison with what competitors buying goods from us at the same time are doing.

Mr. Cox. Could you give us the break-down that would have the same validity and be subject to the same qualifications as your marketing break-down that you gave to the other committee?

Mr. FARISH. I think we can do it. I will be glad to take that under consideration and see if we can't do that. The chief objection to answering your questionnaire literally is this question of how to make a sharp division, to be accurate and to have those figures compared with others which we don't know how they are done, and I dare say every company has a slightly different basis of calculation. There is nothing in our set-up that we care to hold back.

Mr. Cox. I am not suggesting that.

Mr. FARISH. We are making an effort to give you a record that is accurate and that will be comparable to a record made by others.

Mr. Cox. Of course, I wasn't suggesting that you were attempting to conceal anything. It occurred to me, perhaps, since you seemed to be reasonably satisfied with this marketing break-down which we had been discussing, you might be prepared to give us a similar break-down on the other three branches of the industry, subject to the same qualifications as the marketing break-down.

¹ P. 9727, supra.

² Edwin S. Hall, chief counsel.

The CHAIRMAN. I wonder, Mr. Farish, if you could tell us, broadly speaking, upon what basis the marketing units are charged for the products they receive by the refining units.

Mr. FARISH. I think we have already covered that, Mr. Chairman. We charge our marketing units under various formulas what we consider to be the going market to large customers at the time of the transaction. As an illustration, I will say that we bill the sales department of the Standard of Louisiana the same price that we bill the Standard of Kentucky, they being a very large marketer and a very large buyer from us, and for years when we were selling large quantities of gasoline to the Standard Oil of New York at New York Harbor we billed our sales department at the same price as we billed the Standard Oil Co. of New York.

The CHAIRMAN. Is it a realistic arms' length transaction?

Mr. FARISH. Yes, sir.

The CHAIRMAN. Or a bookkeeping account?

Mr. FARISH. No, sir. It is a realistic interpretation of the going competitive market.

The CHAIRMAN. So that one of your marketing subsidiaries would be billed upon the same basis as a nonsubsidiary or wholly strange institution.

Mr. FARISH. Yes; that is what I am trying to tell you, a legitimate interpretation of the going market.

The CHAIRMAN. So there is no distinction in the marketing from the refinery as between subsidiaries and those which are not subsidiaries.

Mr. FARISH. Correct, sir.

The VICE CHAIRMAN. How big a variation is there between the price at which you sell what you call big purchasers and purchasers that cannot be classified as big purchasers? Do you have any sliding scale?

Mr. FARISH. It would probably average around an eighth of a cent.

The VICE CHAIRMAN. Not more than an eighth?

Mr. FARISH. Not more than that.

Senator KING. You are in the competitive field constantly, are you?

Mr. FARISH. Yes, sir.

Senator KING. The competitive field with other major companies and independents?

Mr. FARISH. Yes, sir.

Senator KING. And other pipe-line companies, railroads, and all of those factors?

Mr. FARISH. The competition with the railroads is very slight.

Senator KING. That is to say the railroad rates are so much higher than transportation rates by pipe-lines that it is not much of a competitor?

Mr. FARISH. That is right.

Senator KING. How about trucks?

Mr. FARISH. There the competition lies, and there is a dividing line.

The CHAIRMAN. The testimony has been given at this committee that the charges are made on the basis of railroad freight rates rather than upon the basis of the actual cost of transportation by pipe-line.

PIPE LINES

Mr. FARISH. You are speaking now, I think, of a localized situation involving two gasoline pipe-lines, Mr. Chairman, are you not?

The CHAIRMAN. I think that was the testimony.

Mr. FARISH. That doesn't apply in any business with which I have anything to do, Senator.

The CHAIRMAN. Does it apply in any business of which you have any knowledge?

Mr. FARISH. Only general from the testimony.

The CHAIRMAN. You have no personal knowledge or personal information about that?

Mr. FARISH. No; I have not, sir. I have this comment, though. I don't know whether it ever materialized, but you gentlemen are interested in the economics of this industry, and bearing on this particular point it may be illuminating.

Our company owns an interest in the Ajax Pipeline Co. The balance of the interest is owned by the Pure Oil Co. and the Standard Oil Co. of Ohio. That pipe-line company was built to bring oil out of the Mid-Continent to the Mississippi River north of St. Louis, at which point contact was made with other pipe lines and joint tariffs were filed. Some of the oil went to West Virginia, some of it to Toledo, some of it to Cleveland, some of it across the river at Detroit to Canada. That pipe line had a business at one time of 65,000 barrels a day. Since the Illinois field has come in, that business has dropped down to nothing, practically. That pipe line is a system of two lines. That is a pipe-line problem on our hands now, at least on the hands of the Ajax Co. They have the problem before them of what to do with that pipe line. The total line represents an investment of some thirteen or fourteen million dollars. It is practically out of business because of the Illinois oil field coming in and the former customers not needing any oil from the Mid-Continent areas to come through that pipe line.

What they are considering today is a proposition, and it is only that, to convert one of those lines, or half of that system, into a gasoline pipe line, to move oil from the Mid-Continent areas out to the Mississippi River.

And they have been asked to name a rate or they have been asked to lease a line. The problem came to me only quite recently and I told our representatives on the Ajax board that if a legitimate business proposition is made to them to convert one-half of that line into a gasoline pipe-line system to move oil from Mid-Continent out, that they should name a rate, that they couldn't, insofar as good business is concerned, sit there with an idle investment on their hands. Or, if a proposition is made to them to lease that line for a period of years that would give them a reasonable return on the investment, they should lease the line.

Now, those negotiations—I haven't heard of them in '3 weeks, but I assume they are still going on. Now, the problem, and this is right on the point that you are talking about, Senator, the problem before that Ajax board is, what rate will they ask? As I got the problem when it was presented to me they didn't know how much gasoline might be offered for transportation through it. Obviously, if 35,000 barrels a day was moved they could name one rate, or if

10,000 barrels a day are moved they have to name another rate, or if they lease it they would have to name a rate that would give them a reasonable return. They have that business problem right before them, and they have also got the practical problem and they have the problem that I just touched on, that I don't think that in good conscience they can sit there, even though they would not want to see the gasoline brought from Oklahoma by another pipe line into their territory I don't think in good conscience they can sit there and say "We will do nothing with this line; let it alone."

We don't happen to be affected, therefore I could speak out without even debating it with my own board. I told these fellows, "Well, you go ahead as far as we are concerned and our investment is concerned, and you make a trade if you can get a reasonable price." It so happens that the Pure Oil Co. and the Standard Oil Co. of Ohio, the other owners of the line, may have a little different situation there. They may oppose it. But I don't think they will in the final analysis.

The CHAIRMAN. Why might they oppose it?

Mr. FARISH. Because it is bringing in more competition. It is using their own investment to bring in more competition. Don't misunderstand me; they may have a different point of view.

The CHAIRMAN. You describe a situation in which three companies are interested in the investment of this pipe line. You say that your company would not be affected in its marketing arrangements by the gasoline that would be transported by this line, and therefore you can speak freely, but that the other two—

Mr. FARISH (interposing). By speaking freely I meant I could make a decision on principle without even arguing with my own board about it.

The CHAIRMAN. That is to say, without consideration as to the effect it would have upon the retail price, but these other two will have to consider the effect—Pure Oil and the Standard of Ohio will have to consider the effect—upon the retail market of the use of this pipe line.

Mr. FARISH. That is correct.

The CHAIRMAN. Which is exactly the point that the retailers have been telling us, that the pipe line is used for the point of view not of the profit from the pipe line but for the effect upon the retail market.

Mr. FARISH. You are taking my situation a little far afield.

The CHAIRMAN. I don't want to, Mr. Farish.

Mr. FARISH. The only point I was trying to make, I answered promptly on principle to our representative on the Ajax board, and the only distinction I meant to draw was that these other people may be more widely affected, and therefore it was something they would have to worry about, and probably couldn't act as promptly as I acted on principle.

Now, then, the question is before the board, and to get back to your rate point that opened the discussion, you say, and I think the record shows, that substantially the pipe-line rates of the two major gasoline pipe lines out of the Mid-Continent are based on freight rates. Now, if these people in naming a rate for the use of this pipe line name a rail rate, it will do no good. The people frankly say, "If you name a rail rate, it is of no interest to us. We want something so far below the rail rate that it will give us an advantage."

Well, we say, "An advantage over whom?"

"Over the fellows that own the other pipe line and over the people that use the rails."

"Well, how do you want an advantage over the fellow that uses the other?"

"Well, you have an idle line that is not bringing you any money, therefore you can afford to put it to use for a nominal income." This is the argument.

I say, "On that principle there is nothing doing. But if you want my advice of what rate to name, I will attempt to give it to you."

This is all beside the point, but it is right in on this rate question. I told them; I said, "If you want to name a fair rate for the movement of gasoline through that line, I would take the rate per hundred miles that is in effect by the Tuscarora plant line"—that is a line that we own, and by the way I don't know how it compares, but I think it is substantially 50 percent, or something like that—"I would take the rate in effect on the Sun Pipeline Co.," a gasoline pipe line that goes out into Ohio. "and I would take the rates that are in effect on the Atlantic Oil Co.'s pipe line and I would get an average of those rates, and probably that would be a fair rate per hundred miles for you to establish on the use of this pipe line."

Now, that rate might result in something like 50 percent of the rail rate. I only bring that to your attention as a practical business proposition directly at issue at the moment on this rate question.

Senator KING. Pipe lines, then, I assume from your statement now, have been very active competitors with the railroads to the disadvantage of the railroads?

Mr. FARISH. I think that is correct, sir.

The CHAIRMAN. Is that advantage which the pipe lines have over the railroads passed on to the consumer, or does the consumer pay at the rail freight rate?

Mr. FARISH. I would say eventually, yes.

The CHAIRMAN. But not immediately?

Mr. FARISH. No; everybody that makes an investment to reduce cost tries to get the investment return back as soon as he can. It is a cold-blooded common-sense proposition.

The CHAIRMAN. So that the retailer in this area to which you are referring, to be served—

Mr. FARISH (interposing). He wouldn't be affected, Senator, because he has every competition now that already fixes his price. It would simply enable some of these people, if this thing goes through, to move more gasoline into the area, or to move it at a little lesser cost of transportation than they have today.

The CHAIRMAN. But the advantages, at least, of the low-cost pipe-line transportation are not passed on to the consumer until the pipe-line investment has been adequately taken care of.

Mr. FARISH. No; I wouldn't say that. I would say competition forces it to be passed on.

The CHAIRMAN. You said, not immediately but eventually, and I was trying to clear that up.

Mr. FARISH. That is all I can say about it. Sooner or later it is forced on it.

The CHAIRMAN. But not immediately, because immediately the pipe-line owner wants to take advantage of the lower cost—

Mr. FARISH (interposing). No; it certainly isn't done immediately. My history of the Humble Pipe Line proves that. We were able to hold rates for several years at a good high level of return.

The CHAIRMAN. You were able to hold the rates up?

Mr. FARISH. Up to a good high level of return for several years.

The CHAIRMAN. I am talking now about the passing on to the consumer of the low cost of pipe-line transportation as compared with rail transportation. Now, your answer is now a little bit vague. I thought it was clear at first, and now I don't know whether you want to leave with the committee the impression that it is immediately passed on.

Mr. FARISH. I do not; it is not immediately passed on.

The CHAIRMAN. When does it finally show up in the consumer's bill?

Mr. FARISH. Well, it all depends on the individual circumstances. In some cases it may show up in a few months, in others it may be a year or two, but inevitably—

The CHAIRMAN (interposing). Forces of competition compel it.

Mr. FARISH. Will compel it.

The CHAIRMAN. And until the forces of competition do compel it, it probably won't show up?

Mr. FARISH. Pardon?

The CHAIRMAN. Until the forces of competition actually compel it to be reflected in the retail market, it will not be reflected?

Mr. FARISH. I don't think that is a fair assumption.

The CHAIRMAN. I put it in the form of a question.

Mr. FARISH. If the rates are high, there will be some adjustments anyway. I think Mr. Pew testified, if I am not mistaken, that on his gasoline pipe line they made two voluntary reductions of their own. They were not forced by competition.

The CHAIRMAN. Now, Mr. Farish, we have covered transportation, perhaps, and we have done a good deal of talking about marketing.

Mr. FARISH. Yes, sir.

The CHAIRMAN. And retailing.

Mr. McCONNELL. May I ask one question, Mr. Chairman? Mr. Farish, you have given the committee several instances of the high mortality of pipe lines. In almost every instance they were due, this mortality of pipe-line investment was due, to an unpredictable and unforeseen development, such as discovery of oil in Illinois, which has made the Sun Oil gasoline line a grave question of whether there is any value thereof. I don't see how you are going to give the committee a fair picture of the earnings of your transportation department, the pipe-line department, without arriving at some conclusion as to the proper obsolescence to be charged against those lines. In some cases obsolescence might be as high as 25 percent, you have indicated, I think, in the case of the field in Texas City, where the field was exhausted rapidly. The Ajax line, going from the Mid-Continent field toward Chicago and Ohio, was practically wiped off the books as far as practical purposes are concerned, or what recovery you can make has got to be a change of operation.

Mr. FARISH. That is correct.

Mr. McCONNELL. I don't believe the committee is particularly clear as to what makes up this 28 percent, and how reliable from an investment standpoint or from an earnings standpoint that 2 percent is as

compared to your earnings on marketing, say, where that obsolescence is not a great factor. I have had a great deal of doubt in my own mind as to the dependence that could be placed upon earnings of 28 percent by the pipe-line companies, largely because there is not a large number of investors standing in line to get into that 28 percent, either the pipe-line companies or independents. Would you like to enlarge upon that a little bit?

Mr. FARISH. I deal with pipe lines and that very question to some extent in this paper.

Mr. McCONNELL. Is it pertinent here, when you are discussing the question as to whether these large earnings, reputed earnings of pipe lines, are in a measure a rebate which is defeating the existence of the retailer and the wholesaler of gasoline products? I think there is confusion on that point—a great confusion about it.

Mr. FARISH. Well, I will be glad to take it up here. I think it would come in a little more logically when we get to discussing that very factor of how pipe-line earnings are computed.

Mr. McCONNELL. You said that you could give them a break-down of your departmental figures. You told Mr. Cox that. I don't understand how you could do that without arriving at an enormous obsolescence assumption which would justify the investment; whether it is 25 or 28 percent, or a small part of the 28 percent I don't know.

Mr. FARISH. I think that is correct.

The CHAIRMAN. Well, Mr. Farish, it is now 20 minutes after 12, and unless there is objection we will go over until this afternoon. It is probable that we may be able to go to the question of proration and probably finish with your testimony this afternoon and close this very informative hearing on the whole petroleum industry.

Mr. FARISH. I am entirely at your service.

The CHAIRMAN. Mr. Ballinger, you wanted to offer something for the record.

Mr. BALLINGER. Mr. Chairman, on March 9 and 10, 1939, the Federal Trade Commission introduced testimony before the Temporary National Economic Committee concerning the existence of monopoly and monopolistic practices in the milk industry. One witness, Mr. George A. Johnson, president of the Johnson Milk Co., of Detroit, Mich., was put on the stand to testify as to the effect on milk prices in that city of a new system of milk distribution known to the trade as the milk-depot system.

At the conclusion of the Federal Trade Commission's presentation the Temporary National Economic Committee received requests from Mr. Bernie F. Beach, secretary-manager of the Michigan Milk Producers Association; Mr. Kenneth L. Vardon, president of the United Dairy Workers Union, Local No. 38, Detroit, Mich.; Mr. Theodore H. Montague, president of the Borden Milk Co., and Mr. Thomas H. McInnerney, president of the National Dairy Products Corporation, that they be allowed to reply to statements made by witnesses of the Federal Trade Commission. The Temporary National Economic Committee granted the requests of these parties to be heard, and on May 1, 2, and 3, prepared statements were read before the committee by Mr. Beach, Mr. Vardon, Mr. Montague, and Mr. McInnerney.¹

¹ Testimony of all these gentlemen is contained in Hearings, Part 7.

At the conclusion of this special hearing, the Federal Trade Commission requested and obtained leave of the Temporary National Economic Committee to comment officially to the committee on the testimony of these witnesses. The Commission is accordingly submitting to the Temporary National Economic Committee its appraisal of the testimony of these witnesses.

We ask that it be printed as part of the record.

The CHAIRMAN. Without objection, the request of the Trade Commission to make this part of the record is granted.

(The Federal Trade Commission rebuttal was marked "Exhibit No. 370-A" and is printed, in connection with "Exhibit No. 370," in Hearings, Part 7, appendix, p. 3194.)

The CHAIRMAN. The committee will stand in recess until 2:15.

(Whereupon, at 12:20 p. m., the committee recessed until 2:15 p. m. of the same day.)

AFTERNOON SESSION

The hearing was resumed at 2:30 p. m. upon the expiration of the recess, Commissioner Leon Henderson presiding.

Acting CHAIRMAN HENDERSON. The committee will be in order. Mr. Farish, do you desire to proceed with your regular statement?

Mr. FARISH. Yes, sir; before doing that I think it would perhaps be well to enter in the record here the answer to the question propounded by Mr. Henderson yesterday.¹ I have attempted to answer that as you requested. The simplest way is to read it into the record.

When I spoke yesterday about the reduction in the cost of marketing accomplished by my company between 1933 and 1938, Mr. Henderson asked me why, in the face of such reductions in marketing cost, the price of gasoline as shown in the Oil & Gas Journal averaged 12.75 cents in '33 as compared with 13.09 cents in 1938.

Mr. Henderson has cited the trend in gasoline prices correctly, though I am not able to check exactly the figures which he gave. The most generally used index of gasoline prices is the so-called Fifty Cities Index. That index shows an average price of gasoline exclusive of tax of 12.04 cents per gallon in 1933, 14.07 cents per gallon in 1938, and 13.04 cents per gallon for the first six months of 1939.

This increase in price is explained by the difference in the price of crude oil. In 1933 the average price of 36-gravity East Texas crude was 56 cents per barrel. In 1938 that same average price of crude was \$1.28 per barrel. That is an increase of 72 cents per barrel in the price of crude. It is generally accepted that a change of 25 cents a barrel in the price of crude oil is equivalent to a change of one cent a gallon in the cost of gasoline. Therefore this increase of 72 cents per barrel in the price of crude oil over the period means that the price of gasoline might have been expected to advance three cents. Actually the difference in the price of gasoline shown by the figures which Mr. Henderson has quoted is only about one to one and one-half cents. Therefore a saving in price to consumers of approximately one and one-half or two cents per gallon has taken place by reason of the types of economics which I mentioned yesterday, not only in marketing but in refining, transportation and elsewhere in the industry.

Such reductions in cost not only were effected by my company but by force of competition similar reductions were brought about in other companies.

In confirmation of the relation which I have just cited between the price of crude oil and the price of gasoline I suggest that you look back to the most recent year prior to 1933, when the price of crude was close to the 1938 price. That year was 1930, when the average price of thirty-six gravity East Texas crude was \$1.20 a barrel. In that same year the price of gasoline exclusive

¹ P. 9657, *supra*.

of tax in Fifty Cities was 16.16 cents per gallon. The difference between that price of 16.16 cents per gallon and the average price of 14.07 cents per gallon for 1938 reflects the two-cent saving to which I referred.

That is the best explanation, factual explanation, that I can find to explain the question you asked me.

Acting Chairman HENDERSON. Thank you, Mr. Farish.

Mr. FARISH. To go on with the paper, may I state that I think that we will all make progress and we will have a better understanding of what I am attempting to do as nominated by the American Petroleum Institute to tell the story of the industry, if we carry on in as orderly a procedure as possible following the text of the paper.

Acting Chairman HENDERSON. Most of the disorderly element is not present at the table. [Laughter.]

OPPORTUNITIES FOR THE INDEPENDENT IN MARKETING

Mr. FARISH. In his paper Mr. Swensrud stressed the need for a clear-cut understanding of the functions performed in the wholesale distribution of gasoline.¹ Subsequent testimony amply demonstrated this need, for much confusion developed from the failure to distinguish between the two kinds of business concerns that are covered by the term "jobbers." I am taking the liberty of repeating the distinction. One kind of jobber, called a wholesaler by Mr. Swensrud, sells under his own brand name. That means that he assumes the entire responsibility for inducing consumers to buy his product. He ordinarily shops for his gasoline, buying where he can to best advantage. He buys sometimes from major companies, sometimes from small refineries. Subsidiaries of the Standard Oil Co. (New Jersey) sell considerable quantities to such concerns. But, because he sells under his own brand, the Standard Oil Co. (New Jersey) can do nothing for him in promoting the sale of his product. He chooses that responsibility when he elects to sell under his own brand. Many wholesalers feel no responsibility for continuing to buy from us—accordingly, we feel no responsibility for protecting them.

Over the last few years some concerns of this type apparently have been unable to make a profit, although I know that many others have been able to do so. In general, the reasons for their difficulties are these: The brands sold by the major companies have come to be the standard of value in the minds of most consumers. The quality of the gasoline has been partially responsible for this, but the consumer is much influenced by a whole lot of factors—courtesy and personality on the part of attendants, cleanliness of toilet facilities, attractiveness of stations, free services offered. We know that this is true because we have to know it—for a long time we have been making surveys of what customers think about gasoline and service stations just the way Dr. Gallup surveys what people think about any issue. Most major companies have endeavored to cater to all the consumers' desires; as a result, most consumers prefer to buy a well-known brand.

That means that the wholesaler with a little-known brand ordinarily can get business only by underselling the well-known brands. Most wholesalers, in spite of Mr. Hadlick's testimony,² cannot operate at a lower cost for their wholesale functions than can the major companies. They must, therefore, buy cheap gasoline if they are to

¹ "Exhibit No. 1206," included in Hearings, Part 15, appendix, p. 8671.

² Paul Hadlick whose testimony appears in Hearings, Part 16.

sell at prices lower than those charged for well-known brands. They flourish, then, when unbridled flush production of new fields brings heavy supplies into the market. To the extent that conservation measures minimize the flush stage of new fields, conservation restricts the opportunities for the wholesaler.

But this emphatically is not a restriction on the opportunities for independent businessmen in the marketing of gasoline—it is simply a restriction on the opportunities for operating in a particular way.

Another way of operating as an independent businessman in marketing gasoline is as a distributor; that is, a jobber handling a major brand of gasoline and leaving to the supplier most of the task of inducing customers to buy. Such enterprises are increasing in number rapidly; not only are they not being eliminated, but they are, in fact, growing in importance.

But complaints come to the executives of the Standard Oil Co. (New Jersey) as they have come to you from a small minority of distributors. The complaint is that the spread or margin for such concerns has narrowed over the years. We admit that fact—indeed, we boast about it; we boast about how it has been accomplished. We have found ways of cutting the cost of the bulk plant operation—ways which Mr. Swensrud told you of. We have secured better trucks, we have relocated bulk plants, we have studied handling methods carefully, and we have cut costs. We have no monopoly on brains; other people have done the same sort of thing.

Naturally, we cannot sell to an independent distributor in a territory if we can do the job better ourselves. Without losing out in the fierce competitive race we cannot allow him much more in margin than the cost if we were to do the job. Most distributors know the situation just as well as we do—they get costs down and come within the lower margin. Others just stand still. Frankly, such men usually do not remain our distributors very long, any more than an unsuccessful branch manager holds his job very long. Incompetence gets hurt in a competitive industry.

RETAILING

Mr. FARISH. Retail marketing has always been predominantly in the hands of small-scale independent businessmen, and it appears that they will not be displaced in the future. Since the extension of the so-called Iowa plan, the ranks of independent businessmen have been augmented by the addition of former salaried managers of company-owned stations. Several witnesses before this committee have testified that these men are not really independent because they are continually threatened by salesmen who suggest that 5-day cancelation clauses in leases of company-owned stations will be invoked if the lessee does not do this or that. No doubt such tactics have been used by some salesmen in some companies, but I state emphatically that one cannot generalize on the basis of incidents which not only are exceptions but which also directly violate the established policies of the managements concerned. Oil companies had numerous business reasons for 5-day clauses originally. Many salaried employees do not have the capacity to become independent businessmen, and as a matter of self-protection the oil companies wanted to be able to find new proprietors for stations if the former

managers did not succeed on an independent basis. Today most leases are made for the period of 1 year or longer and contain no cancellation clause whatever. For instance, leases for 1 year or longer without cancellation clauses are now used by my company.

There is always danger that discussion of leasing arrangements may conceal the true economic relationship of the gasoline retailer and his supplier. This relationship involves a mutuality of interest of considerable importance. The gasoline retailer handles a limited range of products from which he often obtains his whole livelihood, and his place of business carries the sign and trade-marks of the supplying company. The latter wants each outlet to be a good advertisement for the brands of the supplier as a result of good standards of service, equipment, and display. The supplier depends upon these highly specialized individual businessmen to make his wares available to the public. He cannot be wholly indifferent to their welfare, because he wants them to remain in business. The oil industry is not unique in this latter respect. There is no point in some comparisons that have been made between retailers of gasoline and retailers of groceries, drugs, and the like. A much more pertinent comparison may be made between retailers of gasoline and retailers of automobiles. As Mr. Pew said, the Chrysler Corporation would be in an absurd position if it filed complaints that Ford dealers do not carry Chrysler cars or parts. Large investments in inventory and in service equipment prevent small-business men from carrying several brands of cars. From the sales and service standpoints, the car dealer whose organization concentrates on the problems of one brand does a more effective job and makes more profits for the capital invested than if several makes are carried. The car manufacturer, on his part, has an outlet that pushes his make of car. The car maker helps his dealers with training courses for salesmen and service men, and he provides them with local promotional material as well as a national advertising program. The analogy between automobile retailing and gasoline retailing, of course, is not complete, but certainly it is more apt than a comparison with grocery stores which carry products of hundreds of manufacturers, no one of whom has a prime interest in the success of a particular store. Both automobile makers and the oil companies want to keep their customers in business, but neither group can guarantee a profit to every retail outlet.

Acting Chairman HENDERSON. I suggest, Mr. Farish, since the four members of the committee present have read and reread your statement, that we discuss seriatim the various portions of your paper, and if at any time the answer you desire to give to a specific question invites reading from the prepared memorandum, that you resort to that. I think we could well go ahead now with questions on the parts you have covered, as to the marketing branch of the industry, before going into the complaints on unfair competition.

Mr. FARISH. All right, sir.

THE IOWA PLAN

Acting Chairman HENDERSON. To start that off, I notice in the current issue of "Business Week" that there is a decided difference of opinion among the majors as to the Iowa plan. The thesis, as you have presented it here, is that that is entirely satisfactory and is likely to continue. Do you have any comment on that, and do you

desire to state for the record whether your own company is firmly committed to a continuance of your present plan?

Mr. FARISH. I will be glad to comment on my own company's point of view, sir. We are entirely pleased with the principle of getting out of the retail field as far as our company is concerned. That is what is primarily involved in the Iowa plan. The record in the Harrington hearings, I think, shows—I have forgotten the exact figure—something like 600 of our stations had already been leased before the influence of the Iowa plan idea was felt in the industry, and it simply means that since that time, I think it is a period of about 4 years, and perhaps within a year after the Iowa plan idea was generally adopted in the industry, the balance of our stations, some 1,600 out of 2,200—600 being already leased—have been leased out to dealers, and we are practically out of the retail business of selling gasoline.

Acting Chairman HENDERSON. Do you know if in the trade it is felt that some of the other major companies that adopted the Iowa plan are seriously considering going back to the ownership and management of retail outlets?

Mr. FARISH. I have had no personal discussions on it, but I gather the same impression that you speak of from reading the trade press, and so on, that some companies are debating the question and perhaps in some instances have taken back some of the stations.

Acting Chairman HENDERSON. That would suggest that some of them have not been satisfied with their experience and that probably they have not found that this abridged margin of which you rightly boast here has been perhaps sufficient to get the kind of operation of outlets carrying their brands that they would like.

Mr. FARISH. I don't know to what you refer. The margin I spoke of and that you questioned me about yesterday was the wholesale margin.

Acting Chairman HENDERSON. Yes; but you speak here today of the narrowing of the margin to distributors. That is your wholesale, isn't it?

Mr. FARISH. That is the wholesale.

Acting Chairman HENDERSON. But what about the margin—

Mr. FARISH (interposing). Between what the distributor pays and what he gets from the public?

Acting Chairman HENDERSON. Yes.

Mr. FARISH. We have no influence on that; that is his business.

Acting Chairman HENDERSON. You don't think that you have any influence on that. Where a company has partially—

Mr. FARISH (interposing). I am not trying to make an overstatement, but what I am trying to say is that is his business; he is free to adopt whatever course he desires.

Acting Chairman HENDERSON. Let's see whether he is or not. The testimony has been that because of certain elements of price leadership and the recognition on the part of nearly all retailers in an area, that any cut they make which makes a serious inroad will be met by others, uniformity of price results. Where you have some of your stations operated under a lease plan, where you operate some as your own, in effect you are setting the margin which a retailer can get, are you not?

Mr. FARISH. If you do that. I have tried to make plain, sir, that we are out of the retail business, with the exception of five stations.

Acting Chairman HENDERSON. Speaking not for your own company, but take companies operating under both plans, where they haven't completely divorced themselves from marketing.

Mr. FARISH. To that extent, of course, they have an influence on the retail price.

Acting Chairman HENDERSON. Don't they have an influence, then, on the retail margin that even your outlets can get? That is, they can't get any more for their product, can they, than the man is getting who handles some other brand where they have split stations or where they have some controlled stations and some operated on lease?

Mr. FARISH. No; if there is any considerable number of stations that are still operated, retail stations that are still operated by the owners, and they post a price, the tendency, of course, is for that price to control in that territory, certainly.

Acting Chairman HENDERSON. You are satisfied, I would gather, that the kind of retailer-manager you have gotten for your outlets, with these leased stations, is satisfactory and that you have gotten pretty near to the optimum of efficiency in the distribution of gas, the lowest cost of distributing gasoline.

Mr. FARISH. We prefer it rather than to attempt to operate the stations ourselves.

Acting Chairman HENDERSON. But it is evident from this discussion in the trade that some companies are not; that there is a likelihood that instead of the prospect being completely one of widening of opportunity for the individual manager, it may get narrower in this sphere of action.

Mr. FARISH. That is a possibility if that trend to go back to company-operated stations should continue, certainly; but my guess is, and it is purely a guess, that that trend will not continue—that the retailing of gasoline will remain in the hands of individuals.

Acting Chairman HENDERSON. Entirely apart from the marketing efficiency others than your own stations for retailing, do you think that your company and other companies are interested in this choice of action in order to leave some area in oil open for independents? Is it a deliberate choice of policy in which the controlling factor is that there ought to be some area in which the individual man of small means might get in?

Mr. FARISH. You mean done for that purpose?

Acting Chairman HENDERSON. Yes.

Mr. FARISH. No.

Acting Chairman HENDERSON. You think it is entirely a matter of what is most efficient?

Mr. FARISH. I think it is a matter of business policy.

Mr. O'CONNELL. I have a question not related directly to what you have just finished discussing, but as I recall it you suggested yesterday that technological development, such as the new catalytic cracking process will offer substantial opportunities for the small man in the refining field, and I didn't quite understand how that particular development would be to the advantage of the small man. Could you explain that for me?

Mr. FARISH. I will try to, Mr. O'Connell. I don't think I can put it quite as definitely as you put it in your statement, but what I attempted to say, what I mean to say is, that there is a strong probability that the modern catalytic plant will widen the area of activity of the small refinery by reason primarily of the fact that it will convert more of the barrel of crude into higher grade products and have less fuel oil to dispose of, and it will make higher quality products, better gasoline, than we are making under most processes.

Mr. O'CONNELL. I understand that. I don't quite relate that to the opportunity for the small man.

Mr. FARISH. This business of the refiner having to be located so that he can get rid of all of his products, the advantage of location is very important; the advantage of location would be minimized somewhat by this new type of refining.

Mr. O'CONNELL. So you could have your refinery in Wyoming, say, or near the field of production as distinguished from near the market?

Mr. FARISH. To a little better advantage; yes. I don't know that it will be compelling, but I simply put that in as a new development that may influence this trend.

Mr. O'CONNELL. That occurred to me as to the possibility of refining the oil near the source of production. I take it that if by a process you could convert 100 percent of the crude into gasoline your transportation advantage would then largely disappear.

Mr. FARISH. That is the thought. That is what I meant to indicate by the statement.

PATENTED PROCESSES FOR REFINING

Mr. O'CONNELL. You also suggested that there were several different patented processes involving this catalytic cracking process. What companies in this country own those processes?

Mr. FARISH. Well, there are two main processes, as I understand it today. This is a new art, and the first development and the first operations to become commercial on this development are known as Houdry process, which is owned in part by the Sun Oil Co., the Socony Oil Co., and some French interests under the name of Houdry, a Frenchman by the name of Houdry being perhaps the originator of the process.

Mr. O'CONNELL. It is owned in part by those three interests.

Mr. FARISH. That is correct.

Mr. O'CONNELL. The two companies here are not licensees?

Mr. FARISH. They are part owners of the patents, and as I understand it they are offering that patent to the public; I mean the use of the process to the public. The other process, I don't know whether the other process has a technical name, but it is being offered to the public by Kellogg & Co., who are the licensors under the arrangements.

Mr. O'CONNELL. The Kellogg Co. is the owner of that patent.

Mr. FARISH. Part owner. The other owners are my company, the Standard Oil Co. of New Jersey, the Shell Co., I think the Standard of Indiana, and there may be some others. One of the foreign companies made some contribution. That is a separate development of catalytic cracking from the Houdry process.

Mr. O'CONNELL. Either process could be used independently of the other?

Mr. PARISH. Either process is being offered to the public; yes, sir.

Mr. O'CONNELL. Under some sort of royalty basis?

Mr. FARISH. On a royalty basis.

Mr. O'CONNELL. Do you happen to have in mind what that basis is?

Mr. FARRISH. I am sorry I can't give it to you. We were offered the use of the Houdry process but we thought the royalty was higher than justified, and we felt that, given a little time, we could develop a process of our own that would be just as satisfactory, perhaps more satisfactory.

Mr. O'CONNELL. As a matter of policy, insofar as you know, that process would be equally available to anyone who might desire to use it, on comparable terms?

Mr. FARISH. I know it is easily available. Kellogg is offering to build plants today for anybody that wants a plant.

Mr. O'CONNELL. Would that be a requirement of the licensor, to build a plant?

Mr. FARISH. No; he doesn't have to use Kellogg, but a man that could go out and build a technical plant of that kind without expert designing and help in starting it would have to be a—it would be a very grave mistake to even attempt it.

Mr. O'CONNELL. You mean Kellogg, in licensing his patent—

Mr. FARISH (interposing). May I put it this way. I think under that arrangement—you see, this is all new and I haven't any written memorandum to even refer to on it, because it is just a new development, but I think under the arrangement there are two licensors, one Kellogg for his clientele and the other is the Universal, if I am not mistaken, for their clientele, and that is for any refiner who would want to build a plant that had the old Dubbs process or the Universal Products process, you understand. There is a separation between these two licensors as to the trade they each serve, but it is open to anybody.

Mr. O'CONNELL. Supposing I don't own a refinery and I want to build one, and use this process—whose client would I be?

Mr. FARISH. You would probably be a client of the Universal. The terms are the same.

Acting Chairman HENDERSON. Does either of these license-granting companies also require that a specific construction company be employed to build the refinery?

Mr. FARISH. I think that is obsolete. They don't have to use the—

Acting Chairman HENDERSON (interposing). Is there anything similar to the ethyl contract about price in either of these?

Mr. FARISH. As I understand it, absolutely nothing.

Acting Chairman HENDERSON. At one time when we were talking informally, you will recall you mentioned the general philosophy that you had and perhaps others in the industry had about patents, and as to whether they be made available.

Mr. FARISH. Yes, sir.

Acting Chairman HENDERSON. I think you said that technology moved so fast that any attempt to keep a close control over a patented process was sure to invite development of a competitive process.

therefore it was much the better business strategy to make it generally available. Did I correctly interpret that?

Mr. FARISH. You did, sir. That is in order to get some of your expense back that you have put out in development work and in research work.

Mr. O'CONNELL. How would the royalty for the use of that sort of process be determined? Would it be based upon so much per gallon or thousand gallons of petroleum products?

Mr. FARISH. I think there are various methods. I will be glad to give you a memorandum on that.

Mr. O'CONNELL. That isn't important. This is digressing.

Mr. FARISH. There are various methods. I think you can buy a paid-up license for a 5,000- or 10,000-barrel plant, or you can have the license on a through-put basis.

Mr. O'CONNELL. That is sufficient for my purpose.

RETAILING ¹

Acting Chairman HENDERSON. On this matter of retailing, there has been considerable testimony, and I must confess that I gave quite a bit of weight to it myself, that since the Iowa plan and the leased station operation plan, the companies selling at wholesale, in carrying out this mutuality of interest you speak of in their relationship, were making leases available at less than the cost to the company, that they were entering into construction agreements for concreting and special facilities, and the impression was certainly created by reference to certain cities where it was prevalent that this practice was on the increase rather than on the decrease. Have you any comment to make on that?

Mr. FARISH. You mean the practice of—

Acting Chairman HENDERSON (interposing). Indirect subsidy.

Mr. FARISH. To a filling station?

Acting Chairman HENDERSON. Yes.

Mr. FARISH. Frankly, I don't know whether it is on the increase or not.

Acting Chairman HENDERSON. For example, in this city one of the leading oil companies put up the cash bond for a taxi group.

Mr. FARISH. I think they all did on that.

Acting Chairman HENDERSON. You think they all did?

Mr. FARISH. The bond was high, and I think there was an arrangement made by each one of these buyers that one company did it and they all had to do it. I will put it this way: So they all did it.

Acting Chairman HENDERSON. That leads to my next question as to retailing practice. Most of these are what we might call non-price competitive arrangements.

Do you foresee the growth of that type of practice, that type of subsidy?

Mr. FARISH. It is pretty hard to answer, Mr. Henderson. I don't know whether it will grow or not, but it might. I will put it this way: Price competition has gotten so tight and the margins are so tight that it is probably largely reasonable to expect competition to develop along other lines.

¹ This subject is resumed from p. 9738, *supra*.

Mr. O'CONNELL. May I ask a question there? Would you care to say anything as to what you think about the social desirability of competition along the plane that you have indicated, nonprice concessions, so to speak, to retailers? We have had a lot of discussion about it, and most of the people who have discussed it have indicated it or characterized it as a very undesirable practice. I have heard no one say it was desirable. Have you any view on that?

Mr. FARISH. That has been a subject of debate within the industry for a long time, Mr. O'Connell, and there are varying views on it. My general view is that it is undesirable.

Mr. O'CONNELL. Of course, it is also a practice, I take it, that if indulged in by one substantial competitor, the other competitors are as a business proposition forced to follow.

Mr. FARISH. Yes; I have given you my opinion. I think it is undesirable. Some of the code provisions in the past had prohibitions against some of these things.

Mr. O'CONNELL. It seems to me to be a very difficult thing to prohibit effectively as an enforcement policy, to prohibit by law or by a code provision or anything else. I should think it would be a very difficult enforcement problem.

Mr. FARISH. I will say this, that under the code it was not enforced.

Mr. O'CONNELL. It was not enforced?

Mr. FARISH. No.

Mr. O'CONNELL. I knew that, too.

Acting Chairman HENDERSON. You have no doubt that the difference in the price charged to split dealers is well grounded in the economics?

Mr. FARISH. I have no doubt of it; no, sir; I think it is justified by the economies involved and by the benefits that a supplier gets from a 100-percent dealer versus a split dealer.

May I take this occasion, Mr. Henderson, just to go back a minute. You referred to the Ethyl Corporation. I don't want to bring up the Ethyl Corporation question.

Acting Chairman HENDERSON. No; we don't want to try a lawsuit here.

Mr. FARISH. But I did have occasion over the week end to ask Mr. Webb if he wouldn't tell me what his policies were in regard to jobber contracts, and I would like to quote just one short sentence from his letter that will, I think, make a contribution to the record in view of the fact that we have no authentic data as to how many jobbers there are in business. Mr. Webb in his letters says: "We now have 16,339 jobbers who hold a license from us."

Representative WILLIAMS. I understand, Mr. Farish, you have said repeatedly here that you are not in the retail business at all.

Mr. FARISH. Yes, sir.

Representative WILLIAMS. Outside of five stations.

Mr. FARISH. Yes, sir.

Representative WILLIAMS. Your marketing operations, then, are confined to the wholesale business.

Mr. FARISH. Yes, sir.

Representative WILLIAMS. And that is conducted, as I understood your testimony, along three different lines. Is that correct. You sell to the jobber—

Mr. FARISH (interposing). We sell to the jobber, we sell to the distributor.

Representative WILLIAMS. And then you handle direct to the retailer through your own agencies. Is that correct? I mean you sell directly through your own agencies to the retailer.

Mr. FARISH. That is correct.

Representative WILLIAMS. By means of that last operation you have said, I believe, that you have materially reduced the marketing expenses.

Mr. FARISH. Yes, sir; in the total operation of wholesaling.

Representative WILLIAMS. The wholesale price, you mean, has been reduced to the jobber and to the retailer?

Mr. FARISH. I said we had reduced our cost of wholesaling, which includes all three divisions that you have just outlined.

Representative WILLIAMS. But the price at which you sell to the jobber is determined by the price; I mean that you can market it for yourselves through your own agencies.

Mr. FARISH. No; I think there is a misunderstanding there.

Representative WILLIAMS. That is the way I understood you; that by reason of your own agencies you had been able to reduce the price and for that reason the price had been reduced to the others.

Mr. FARISH. I think, Mr. Williams, we are confusing a little bit price and costs. What I tried to say is that in our wholesaling operations, selling gasoline to jobbers, to distributors, and to retail filling stations, we have been able in the period of time since '33 to reduce our costs. That has nothing to do with price. We obviously sell to a retailer where we make a tank-wagon delivery to a retail station on a different basis than we sell to a jobber who may be buying tank-car gasoline.

Representative WILLIAMS. Undoubtedly so; but I thought the price at which you sold to the retailer you sold through your own agency determined, by reason of your reduced expenses in your marketing operations, the reduced price you could sell to the jobber.

Mr. FARISH. I don't know that I get the significance of your question. Our cost of selling has been reduced, and obviously that cost of selling in being reduced must be reflected in the price that all three pay.

Representative WILLIAMS. Is there any difference between the price at which you sell to the jobber and the one at which you sell to your distributing agencies?

Mr. FARISH. There might be; in some cases there is.

Representative WILLIAMS. The same grade of gasoline?

Mr. FARISH. As a rule, the independent jobber doesn't buy our branded goods.

Representative WILLIAMS. But what is the difference, after all, so far as the quality of gasoline is concerned?

Mr. FARISH. There is quite a difference between Esso and Essolene and third-grade-gasoline or unbranded gasoline.

Representative WILLIAMS. I mean the first-grade, first-class gasoline. Is it just simply the name or is it a difference in the actual quality of the gasoline?

Mr. FARISH. We think there is a difference in the actual quality.

Representative WILLIAMS. It isn't just a matter of a trade name?

Mr. FARISH. No, sir. We think the trade name carries a guarantee of quality.

Representative WILLIAMS. Then, do you sell at a different price the same gasoline to the different jobbers?

Mr. FARISH. I imagine so; yes; depending on the location of the jobber and the territory he is in, we must have different prices to some of them.

Representative WILLIAMS. And that, of course, as you say, is a different price from what you sell to your independent distributors?

Mr. FARISH. Wait a minute. Our distributors are not independent in the sense that the jobber is independent.

Representative WILLIAMS. Well, I believe you used the words "independent distributor" yourself, didn't you?

Mr. FARISH. I meant jobbers if I did.

Representative WILLIAMS. I think I have understood your difference between the jobbers and the distributors.

Mr. FARISH. All right; yes, sir. Then, if we understand that, that is all I was trying to clear up.

Representative WILLIAMS. I am very sure I understand the difference you made between those, but in the one case you sell your branded gasoline and in the other you don't.

Mr. FARISH. That is right.

Acting Chairman HENDERSON. In that reduction of the cost of marketing, how large a part have the cutting off of customers that don't have large gallonage and trying to get each customer on a paying basis played?

Mr. FARISH. I don't think that has had any part.

Acting Chairman HENDERSON. That has been one of your practices in recent years, hasn't it?

Mr. FARISH. Yes. I have a tabulation on that that I was going to introduce in the record in response to a question that Congressman Sumners made. If you like, I will read it into the record.

Acting Chairman HENDERSON. I think this is the proper place.

Mr. FARISH. He asked me the question: How were these costs reduced? The answer to the question is this:

1. Elimination of waste mileage in trucking through better routing;
2. Use of trucks better adapted to the specific route and type of delivery;
3. Reduction in unit time of making deliveries by increasing the size of each delivery or dump, and at the same time securing the maximum hours of service per truck;
4. Reduction in truck turn-around time in bulk plants;
5. Reduction in depreciation through use of trucks with lower capital cost per barrel capacity;
6. Reduction in maintenance of trucks through better supervision;
7. Elimination of excess bulk plants;
8. Better organization of work within bulk plants;
9. Marked reduction in stock losses by reducing evaporation and leakage;
10. Elimination of the use of interior bulk plants for certain parts of our business by making deliveries direct from a water terminal;
11. Reduction in size of stocks and increased turn-over in stocks at bulk plants;
12. Better allocation of salesmen's territories and control of salesmen's expenses;
13. Change in form of organization that gave more local supervision to our business;
14. Better organization and control of statistical and clerical work including consolidation of accounting offices;
15. Reduction in wastes and elimination of lost motion throughout sales department.

Acting Chairman HENDERSON. Suppose now that we proceed to III, "Complaints of Unfair Competition."¹ Do you want to make any general statement on that?

Mr. FARISH. We talked about that a great deal this morning and I think I can summarize that quite briefly, going back to the prepared summary that I had in hand yesterday morning. [Reading:]

Closely related to the preceding topic is the matter of unfair competition. A number of such complaints have been voiced during these hearings. Indeed no hearing on the petroleum industry has been held in recent years when complaints of unfair tactics have not been leveled at the various organizations in the industry. In addition to the complaints at the public hearings, State and Federal bodies are constantly investigating charges of this same character. There are several observations to be made about these complaints.

1. There is danger that concentration on particular complaints will cause a loss of perspective and divert attention from the main lines of the inquiry.

2. It is to be doubted whether instances of unfair competition are really frequent, flagrant, or widespread. We believe in fact most of the complaints come from small minorities.

3. Many of these complaints cancel each other out. No matter which way a company moves, somebody complains.

4. Executives of major oil companies are not indifferent to complaints about unfair competition. Executives do have a sense of public responsibility; big business today is forced to operate in a "gold-fish bowl," to get back to my original illustration.

5. One important aspect of complaints that ought not to be overlooked is the extent to which complaints are themselves evidence of the existence of vigorous competition. Complaints by some of the competitors are one of the earmarks of a competitive situation.

Some of the complaints about unfair trade relate to the competition between integrated and nonintegrated companies.

I believe there we go on to another subject and I will skip that. That is a brief summary.

Acting Chairman HENDERSON. Let's go on with the statement on integration.

Mr. FARISH. If you have no objection, I would like to read this brief statement on integration, I think it is only two pages. I think it is a rather important part of the whole inquiry. Page 16.²

INTEGRATION

Mr. FARISH. One particular complaint of unfair competition is made so often that it deserves a special place in this summary. This complaint relates to integration. Much evidence has been introduced in this hearing in regard to the competition between integrated and nonintegrated companies.

Integration is the uniting into one business of several of the stages through which a material passes before it reaches the ultimate consumer. The conditions under which integration is desirable are: (1) Large volume of business in a single commodity group; (2) highly specialized production, manufacturing, transportation and distribution techniques; and (3) substantial advantages (at some stages) in large-scale operation. These conditions characterize the petroleum industry, and it follows therefore that the relations between any one of the stages of the industry and the others next to it are peculiarly close. The refiner needs to be assured of his market.

¹ "Exhibit No. 1323," appendix, p. 9930, at p. 9939.

² Of Mr. Farish's written summary.

The marketer needs to be assured of his supply. Both need a steady flow of products for efficient operation. Neither is interested in other than the one major product and its related group of byproducts. Neither can transfer his specialized equipment to the handling of some different product. There is a high degree of mutual interdependence imposed by the facts. If such relationships are not provided by common ownership, they must be provided by contractual arrangements. When such close relationships take the integrated rather than the contractual form, there is no need for secrecy or tactical maneuvering between the parties concerned. Integration permits the full exchange of information and experience among specialists in the several divisions of the company.

Integration by and of itself does not, of course, automatically produce earnings. But because of the close dependence of one phase of operation on another in the oil business, the integrated form of organization does help very greatly to insure the continuity of the enterprise and to stabilize such earnings as the skill of management is able to produce. Not only the normal operating schedule, but particularly the capital outlay need to be planned in advance; such planning can be more effectively accomplished by an integrated company than a nonintegrated one. Because of the rapid changes in oil technology, it is necessary constantly to spend money on research and to invest capital in replacement in order to keep abreast of competition. Since the inherent risks of the oil business are substantial, conservative investors as distinct from speculators, want to have some assurance of continuity and stability of earnings before they put capital to work. Without integration oil companies would not have been able to spend such large sums on research and improvements. Integration, therefore, bears a very direct relation to both progress and investment.

It is of interest to note in passing that the current attack on integration, not only in the petroleum industry but also generally, is a new fashion in business and economic criticism. A few years ago it was not integration that was attacked, but, instead, the system which was in disfavor was the one in which a large number of steps intervened between the consumer and producer with a separate business enterprise hoping to make a profit at each step. The days of agitation against the middleman, the days when the intervening of a large number of separate business profits between the raw-material producer and the final consumer was thought to be socially wasteful, are within the memory of all of us. In essence, integration simply amounts to an effort to draw the shortest possible line and make the closest connections between the production of the raw material and the delivery of the finished product to the final consumer; and if these functions can all be combined under one general overhead and one profit, so much the better for the consumer.

It is a curious thing that it should be thought somehow socially undesirable for a company to fail to levy a profit at each stage of a combined operation; and yet that notion seems to underlie much of the criticism of the integrated companies' profit-and-loss accounting. There seems to be suspicion because an integrated company has difficulty in saying just how much its profits are at each stage of its operation—production, transportation, refining, and marketing. This difficulty arises from two sources. First, there is a definite accounting

difficulty, not alone in the allocation of overhead charges to the various activities but also in the determination of the "cost" figures at which transfers of products are made. At what "cost" shall crude oil from the company's own wells be charged to the refinery? At what refinery billing price shall gasoline be charged to the company's own bulk stations? Small variations in the "cost" figures at which these transfers are made will cause very large differences in the departmental "profits." In the second place, there is a policy difficulty. An integrated company should not think of its total profits as merely the algebraic sum of the net profits and net losses of its operations at each of the several stages in which it is engaged. Instead, the total over-all profit is the major objective. One of the principal advantages of integrated operation is that the management may see as one whole the problems of production, transportation, refining, and marketing. The aim of the management, therefore, is to operate each stage of the business harmoniously with all the other stages in such a way as to maximize the company's total earnings. Concentration merely on the making of profit at each stage, irrespective of the effects on the other stages, is not a sound management philosophy for an integrated company. If the integrated company is to succeed in doing a better job, not only for stockholders but also for consumers, top-side management must take the general view.

There is no denial of the fact that many of the complaints which have been voiced to this committee arise out of the competition of integrated companies with nonintegrated companies. The argument is advanced that even if the greater over-all efficiency of the large integrated company be granted, still it is unfair competition for that company to operate side by side in the same markets with nonintegrated companies, because it is in a position to spend more money at a particular stage of operation than its smaller competitor. To take such a view is to argue that competition should be kept static, that experiment, change, and progress in the grouping and combination of business functions should be restricted. If we are to maintain a free economy, it is vital that such experiments and changes should not be restricted. Invention and discovery along these lines are as vital as invention and discovery in a laboratory or a manufacturing plant. If we are going to maintain anything like a steady flow of investment in this country, the way must be open for capital to make experiments.

It is this freedom of capital which needs to be emphasized, rather than any particular pattern of business. It has been testified that well-managed nonintegrated companies are amply able to maintain themselves in the industry alongside the integrated companies. Nobody wants to force them to become integrated. When the major companies found that the complete form of integration of the marketing function represented in the operation of owned filling stations had more disadvantages than advantages, they withdrew from such operation. Conceivably at some future time economic and technical changes not now foreseeable may cause a further swing away from integration, in which event capital should be free to move in the direction which it believes to hold the most promise of profits.

Acting Chairman HENDERSON. Do you think, Mr. Farish, that the movement toward integration actually increases the amount of investment in an industry?

Mr. FARISH. I think it does; yes.

Acting Chairman HENDERSON. In other words, if your type of integrated company did not make the investment in refineries or distributing systems, in pipe lines, the investment would not be so large?

Mr. FARISH. I think they widen the scope and area of the investment.

Acting Chairman HENDERSON. It is suggested, and your testimony confirms, that the integrated companies are on the whole more successful than the nonintegrated. It would seem to me that the losses which are well known to small operators find their way into the competitive system more readily than through the integrated companies. It seems to me to suggest that what is done is that the integrated company finds an outlet for some of its surplus funds, and that opportunity, therefore, is delimited for an independent.

Mr. FARISH. Do you state, Mr. Henderson, that the profits of the integrated company are larger than the profits of the nonintegrated company?

Mr. HENDERSON. I thought that was your testimony.

Mr. FARISH. I don't think so. I don't recall making any such statement.

Acting Chairman HENDERSON. Quoting a previous statement by you:

* * * the integrated form of organization does help very greatly to insure the continuity of the enterprise and to stabilize such earnings as the skill of the management is able to produce.

Mr. FARISH. That is right, I didn't say they made a larger profit.

Acting Chairman HENDERSON. They have more stable profits.

Mr. FARISH. I think that is correct.

Acting Chairman HENDERSON. Isn't it true that the integrated companies as a group did make a larger rate of profit than the non-integrated ones, or that the larger companies make a larger profit?

Mr. FARISH. Not some of them.

Acting Chairman HENDERSON. I said as a group.

Mr. FARISH. I think the record would show many non-integrated companies make a larger return on their investment than the large integrated companies.

Acting Chairman HENDERSON. I think that is true of companies that catch a new or flush production and they have got aggressive management, something like Phillips and companies like that.

Mr. FARISH. No; over the years I think it is true of quite a few companies.

Acting Chairman HENDERSON. But as a group that is not the fact.

Mr. FARISH. Well, of course, if you include all efforts, all enterprises in the oil industry, I think I will agree with you, yes; that they don't make as much money.

Acting Chairman HENDERSON. Therefore, probably more capital would find investment if it were left entirely to individual entrepreneurs.

Mr. FARISH. You mean, if there was no integration anywhere in the oil industry that there would be more capital invested in it? I can't agree with that.

Acting Chairman HENDERSON. You don't agree with that?

Mr. FARISH. No.

Acting Chairman HENDERSON. You have a strange tone running through here that the public should not have any misgivings about integration, and some of your able testimony here is plainly suggestive of other testimony where proposals for divorcement have taken place. Why do you suppose the public does really have this suspicion about integration?

Mr. FARISH. Well, I doubt whether the public has any suspicion or feeling on it at all, speaking of the public.

Acting Chairman HENDERSON. You think it is confined to a small group?

Mr. FARISH. I think so; yes.

Acting Chairman HENDERSON. You think it is a suspicion against bigness rather than against integration, then, when you keep referring to its persistence since 1911, for example, as to the Standard Oil Co.?

Mr. FARISH. I would be inclined to think that, yes, sir.

Acting Chairman HENDERSON. That it is this general apprehension of the inequality of competing power between the individual and a large aggregation of resources?

Mr. FARISH. I think so.

Acting Chairman HENDERSON. And the nature of your argument, as I gather it here, is that that is not warranted by the facts?

Mr. FARISH. That is correct, sir.

Acting Chairman HENDERSON. You don't think that it is antisocial to entertain a general suspicion about the inequality of bargaining power? In other words, let me put it this way—

Mr. FARISH (interposing). You have got me there. I don't know just what you mean, but it is all right.

Acting Chairman HENDERSON. You use some big words here—maximi and things like that—I thought that would be very apparent, but I will restate it. You wouldn't say that anybody who felt a bit uneasy about giantism and corporate structure was antisocial, or was necessarily against the competitive profit system, would you?

Mr. FARISH. I must admit—would you read that question again?

(The reporter reread Mr. Henderson's question.)

Mr. FARISH. That anybody who felt that way was antisocial?

Acting Chairman HENDERSON. Yes.

Mr. FARISH. No; I don't know that I would.

Acting Chairman HENDERSON. Didn't you feel that way yourself when you were an independent producer?

Mr. FARISH. Didn't I feel antisocial?

Acting Chairman HENDERSON. No; I am not saying what some of your larger competitors thought about what you were saying when you were an independent producer. Didn't you feel somewhat that way yourself when you were out there battling as an independent?

Mr. FARISH. Yes, sir; I felt, as an independent, in the days when I was making the fight, in the speeches you refer to, that I wasn't getting a fair deal, that it wasn't a free economy.

Acting Chairman HENDERSON. But you have changed your mind?

Mr. FARISH. Conditions have changed.

Mr. COX. Conditions for you, or general conditions?

Acting Chairman HENDERSON. Mr. Cox suggests that maybe your condition has changed.

Mr. FARISH. Of course, my conditions have changed, but the conditions under which the independent operates today have changed.

Acting Chairman HENDERSON. You think he gets a fair show?

Mr. FARISH. I think it is a free economy today. In the days you are speaking of, I don't think we want to go back into that, it is a long story, but in the days you are speaking of pipe-lines were not common carriers, the oil producers (of which I was one) had to sell the oil on contract, 6 months' or a year's time regardless of market, and he had absolutely no freedom of choice as to what he did. I fought those conditions and we got the laws of Texas changed to where we have what I call a free economy in the producing and transportation of oil today.

Acting Chairman HENDERSON. At least a freer one.

Mr. FARISH. All right; put your interpretation on it.

Acting Chairman HENDERSON. I will make my own. I can't agree with you that it is an entirely free economy within what I consider a free competitive system. Maybe I can develop that in some other part of your testimony.

Mr. FARISH. All right, sir.

Representative WILLIAMS. As I understand your testimony on the subject of integration, it is your view that the system of integration between the various activities in the oil industry is a sound, economic, saving policy.

Mr. FARISH. Yes, sir.

Representative WILLIAMS. That is the substance of it?

Mr. FARISH. Yes, sir. Shall I go on?

Acting Chairman HENDERSON. Yes.

Mr. FARISH. I don't necessarily want to read this, but I do think it is helpful if we are going to consider the pipe-line situation to read it. I don't want to inflict anything on you gentlemen though.

Acting Chairman HENDERSON. Can't you just tell us what you are thinking? I don't mean by that to imply, Mr. Farish, that this is not your own thinking.

PIPE LINES¹

Mr. FARISH. I can do that, but it may take a little longer time. This is somewhat boiled down, so to speak, but the point I want to make about pipe lines is this. I think I can state it fairly briefly, and a good bit of it is in the record from this morning's testimony, but pipe lines today, speaking now of crude pipe lines, are common carriers in law and in practice, and any user or prospective user of a pipe line can get service and use of a pipe line. In fact, most of the pipe lines are operating under capacity and are hungry for business and are after business.

Acting Chairman HENDERSON. You see no reason why a common carrier, as you have described it here, and on which there are some doubts as to complete acceptance of your view, should not be owned by producers of oil and no reason why they should be divorced?

Mr. FARISH. I think there is every reason why they should not be divorced.

Acting Chairman HENDERSON. Why?

Mr. FARISH. The chief reason why they shouldn't be divorced is because pipe lines, to be successful, and pipe lines, to carry on their function, are essentially a service unit.

¹ This subject is resumed from p. 9731, supra

Acting Chairman HENDERSON. They become a plant facility.

Mr. FARISH. That is one way of putting it.

Acting Chairman HENDERSON. You see no essential conflict between the plant-facility concept and the common-carrier concept?

Mr. FARISH. No, sir; I do not.

Acting Chairman HENDERSON. How do you distinguish between the divorcement of capital lines and manufacturing operations by railroads and, inversely, the ownership of railroads by producing companies?

Mr. FARISH. I think there is all the distinction in the world between the operation of railroads and the operation of pipe lines.

Acting Chairman HENDERSON. You understand I am not suggesting any opinion when questioning that. I am offering an opportunity.

Mr. FARISH. I understand. Pipe lines are built primarily because large refineries have found it necessary to have an assured supply of crude, and their only way of having an assured supply of crude—I am going back into the past now—was to build pipe lines in order to reach productive fields so as to be able to produce and buy oil in those fields and get it to their refineries. That is the urge, that is the reason that pipe lines were built.

Acting Chairman HENDERSON. Now that they are built, is there a good reason why they should continue under ownership?

Mr. FARISH. Yes; because the oil industry has not stopped expanding. We are still finding new oil fields, and many companies today, Mr. Henderson, are finding it necessary to extend pipe lines to new areas, to broaden their gathering systems to reach new oil fields and new leases so as to keep up that current supply of crude, to keep it coming in. Our business is an expanding business, and they may need 20,000 barrels of oil more next year than this year. The problem is how to get it, and how to get it most efficiently.

They finally work out their problem; if we extend the problem into this field and that field, with the production we have there and the production we have here and the purchases we make in those fields, we can get the 20,000 barrels we need. Therefore, they extend that pipe-line system into those fields to get that service.

In other words, a pipe-line system is a constantly changing map reaching new areas, new territories, all of the time.

Acting Chairman HENDERSON. And your position is that the producing company, foreseeing what its needs will be and what its markets will be, is in a better position than leaving it just to entrepreneurial risk as to whether those pipe lines get built or not.

Mr. FARISH. Yes; they might not be able to get their oil otherwise, assuming it is a considerable quantity. They either have to contract it or they have to go out and take some risk in building a pipe line to get the oil in.

The only point I am trying to make is that the pipe-line systems as we have them today, and as they are operated, are not a fixed system as the railroad system is.

Acting Chairman HENDERSON. It is not a shrinking system like the mileage of railroads?

Mr. FARISH. It may shrink in a particular area where you have to take out a pipe line and reach out to some new area.

A separately owned pipe line, in my opinion, would be up against many, many difficulties in carrying on the day-to-day decisions of

what to do with regard to additional supplies of oil, and so on, that an integrated pipe line is not up against, because they would not take any chances. Why should they take any chances? They are limited, don't you see, as to what to do. But the owner of that pipe line, using it as a plant facility, can take chances and can reach out, and he may buy properties, producing properties, in the area to which he is extending his line in order to get his oil, so it is a constantly expanding operation.

Acting Chairman HENDERSON. What do you think of the argument that the charges for transportation are too high to the non-owner, and therefore place him at a disadvantage with the owner because they get what amounts to a rebate through the high profits of the pipe lines? I am pitching you some straight balls here.

Mr. FARISH. All I can say on that, Mr. Henderson, is, do you know anybody that likes to pay freight?

Acting Chairman HENDERSON. Do you want that to stand as your answer?

Mr. FARISH. No, no, no; that is only a preliminary.

Acting Chairman HENDERSON. All right.

Mr. FARISH. My answer to that is this, sir, that if pipe-line rates or pipe-line regulations are in any wise unreasonable, the remedy exists at law to correct them and have them changed. I am most familiar with Texas, having lived there most of my life, and having had something to do with liberating, if you will, the use of pipe lines for the producer or the refiner that wanted to utilize them.

Acting Chairman HENDERSON. You mean the days when you were a trust-buster?

Mr. FARISH. Right.

Any producer or any refiner had the free use of pipe lines. Now, then, pipe-line rates in Texas—you are asking now about rates particularly—have come down over the years. I explained to the committee this morning that when my company, which was then the Humble Co., were expanding and building a large pipe-line system we had to borrow some \$50,000,000 to do it, and our position was that we couldn't afford to take the risk unless we got high earnings; we didn't know how long the oil fields were going to last, we didn't know how to measure the risk, and over the time pipe-line rates have come down in Texas. They have come down primarily through competition. I quote in this paragraph on page 19, I think, one of the first major reductions in pipe-line rates, and there is a statement issued by me as president of the Humble Oil Co., when we reduced rates generally throughout the State some 20 percent in the Humble Pipeline Co. rate. Competition has forced the reduction of rates over the years. I can't tell you what the average earnings of the Texas pipe line are today, but my guess is that they are under 10 percent on what would be a fair valuation.

Acting Chairman HENDERSON. That is not true for all pipe lines, though?

Mr. FARISH. Pardon me?

Acting Chairman HENDERSON. That is considerably under the average for all pipe lines.

Mr. FARISH. That is not true for each individual pipe line. I am talking about the Texas pipe line as a whole. I think I quote in here

the earnings of two pipe-line systems that we are interested in. We estimate the Humble Pipeline Co. earnings today at 11 percent. We estimate the Standard of Louisiana pipe-line department earnings at 15 percent. The Oklahoma Pipeline Co., which we also own, is earning nothing; there is considerable investment but it is costing us money to own it today. The Ajax Pipeline Co., in which we are interested, has had a 65,000- to 70,000-barrel volume of business going through, and it is reduced to about 10,000. So I presume it will not be on an earning basis.

Summing up our own investment the Standard Oil Co. of New Jersey, I daresay we are not netting over 8 percent, not over 8, somewhere around 8 to 9 possibly, on our pipe-line investment today.

Acting Chairman HENDERSON. As to the general average which you cited yesterday, for the total investment in oil companies, there is no doubt but that is far less than the particular part of the investment that is in pipe lines.

Mr. FARISH. That is correct, sir.

Acting Chairman HENDERSON. Does that suggest that there is an inferiority of competition among pipe lines?

Mr. FARISH. An inferiority?

Acting Chairman HENDERSON. Yes.

Mr. FARISH. No; I don't think so.

Acting Chairman HENDERSON. Why do you suppose it is?

Mr. FARISH. Why do I suppose they get those rates?

Acting Chairman HENDERSON. Why do we have what amounts to almost, on the most modest investment, a treble rate in profits on pipe lines as against the investment in industry generally?

Mr. FARISH. I think the reason for it, if that is what you mean, is that the pipe-line rates are a service rate that is fixed, and we all pay, those of us that use the pipe lines, and, mind you, the owners do most of the using, they all pay that rate in good times as well as bad times. Therefore, there is a constant earning to the pipe lines where there isn't a constant earning in the other branches of the industry.

Acting Chairman HENDERSON. It is a rigidity in price.

Mr. FARISH. All right, it is a tariff rate, it is a fixed earning.

Acting Chairman HENDERSON. You didn't answer this question I asked you as to the difference that exists between the nonowner and the owner and the advantage in favor of the owner. For example, take the case we were approaching yesterday in which we talked about the minimum tender on gasoline lines, and if I recall you said you weren't so familiar with gasoline lines. The testimony was to the effect that as far as the charge was concerned, the all-rail rate was charged and that this was considerably higher than the rate by the pipe line. Does that not put the nonowner at a considerable disadvantage in competition with the owner?

Mr. FARISH. Well, that is a difficult question to answer.

Acting Chairman HENDERSON. I don't find it difficult myself. I have answered it for myself without difficulty and I am asking you if you can attack it.

Mr. FARISH. Let me put it this way, Mr. Henderson. You are talking now about Oklahoma and the Mid-Continent situation.

Acting Chairman HENDERSON. And transportation rates over the gasoline lines, Great Lakes.

Mr. FARISH. The use of that pipe line is largely dependent on the location of refineries. My position would be this, or my understanding of the situation would be this: If any refinery, if there is any, located at any one of the points of origin of gasoline going through either one of those lines today wanted to use that line, he could use it. Now, you say—most of these refineries, mind you, that say they are discriminated against are not located at points of origin—he could use it at the rate. Your point is, if he paid the rate, wouldn't he be at a disadvantage as compared to the man that owned an interest in the pipe line. Well, obviously the man that owned the interest in the pipe line is getting a substantial earning on the money he has got invested in the pipe line. There isn't any argument about that at all.

Acting Chairman HENDERSON. And he gets it not from the rate which is fixed as a common carrier, but from the ability to charge the all-rail rate.

Mr. FARISH. He is charging it to himself, but the point I want to make——

Acting Chairman HENDERSON (interposing). That is just a pocket transfer.

Mr. FARISH. That is exactly the illustration I used this morning. He is charging it to himself. But if any refiner is located at any one of these points of origin and wants to use that line, my understanding is that he has not only the privilege of using it but in all probability he can buy into that pipe line if he wants to make the investment. Numbers of them have.

Acting Chairman HENDERSON. Suppose he hasn't the money to buy in it and is a small man and wants to stay in business. Then he is out of luck.

Mr. FARISH. He is out of luck.

Acting Chairman HENDERSON. He is mainly out of luck on account of the charge that is assessed against him for that transportation.

Mr. FARISH. Well, if he wants to sell in those territories that they are selling in he is out of luck, of course, if he is not willing to invest in a pipe-line movement of his own, because the rail movement is probably just as expensive or more.

Acting Chairman HENDERSON. May I suggest that is the reason why many questions are not raised about the 50,000-barrel tender?

Mr. FARISH. He has the equal advantage to reach other areas so as to compete. On the 50,000-barrel tender, I understand that tender is 25,000 barrels. I don't know how it gets into the record all the way through the piece.

Acting Chairman HENDERSON. I think Mr. Wilson put it in. Is Mr. Wilson here?

Mr. FARISH. I understand since August——

Acting Chairman HENDERSON (interposing). Mr. Wilson was the expert that was selected by the industry.

Mr. FARISH. I don't think Mr. Wilson testified on pipe lines. Mr. Dow did, I think.

Acting Chairman HENDERSON. He testified on this particular subject, because I asked him the question myself.

Mr. FARISH. At any rate, I would like to state for the benefit of the record that the tender is 25,000 barrels on the Great Lakes Pipeline.

Acting Chairman HENDERSON. Twenty-five thousand barrels is a pretty big tender, isn't it, regardless of the amount?

Mr. FARISH. It isn't much of a tender for a refinery; no. Mr. Henderson, I don't want to debate that. If 25,000 barrels is too high for any shipper, he can complain and he can get the thing down.

Acting Chairman HENDERSON. That isn't the point. Why should he go and complain if what he is going to get charged is the all-rail rate?

Mr. FARISH. May I ask you a question? Do you know, does this record show, any user of these pipe lines that has ever asked to have his gasoline tender reduced?

Mr. Cox. The record shows that no one but the major oil companies ever uses the gasoline pipe lines.

Mr. FARISH. Doesn't the record also show that no one has ever asked to use them?

Mr. Cox. I am prepared to assume that no one has ever asked the Interstate Commerce Commission to reduce the tenders.

Mr. FARISH. And no one has ever asked to use the lines.

Mr. Cox. The questionnaires show that the fact is that no one does. Why that is I don't know; the record is silent on that.

Mr. FARISH. I submit that there is nothing in the record that shows that anybody has ever asked to have gasoline transported through them.

Mr. O'CONNELL. If I understand you correctly, I see no reason why anybody would ask if they paid the all-rail freight; in any event, I see no reason why one would want to move his oil through a pipe line. Is that the answer?

Mr. FARISH. It may be the answer. My answer is that there is no one who has a refinery tributary to it that could use it.

Mr. Cox. They are not in a position to use it.

Mr. FARISH. They are not in a position to use it.

Acting Chairman HENDERSON. Would that be true of new refineries or the transplanted ones that have been erected in Illinois recently?

Mr. FARISH. They are entirely removed, they are in another area entirely. I had some little discussion on that on another matter this morning, Mr. Henderson, that I wish you would read.

Acting Chairman HENDERSON. I think you can rest assured I will read it.

Mr. O'CONNELL. You spoke about competition as having forced a reduction in pipe-line rates. Did you mean competition with railroads, or did you mean competition with other producing areas?

Mr. FARISH. Competition with other producing areas, competition within the industry.

Mr. O'CONNELL. But it isn't competition with competing means of transportation at all?

Mr. FARISH. No, sir; nearer sources of supply.

Mr. O'CONNELL. As a matter of fact, there probably isn't much effective competition as between pipe lines and other means of transportation, is there?

Mr. FARISH. As far as crude is concerned; no.

Mr. O'CONNELL. How about gasoline?

Mr. FARISH. In short-haul areas; yes.

Mr. O'CONNELL. Short haul?

Mr. FARISH. Trucks have taken a great deal of business away from railroads.

Mr. O'CONNELL. So that actually except for this competition between producing areas the regulator of the rates or of the profits of pipe lines is Government regulation rather than competition.

Mr. FARISH. A lot of it.

Mr. McCONNELL. Mr. Farish, I am not sure that you understood Mr. Henderson, at least the purport of Mr. Henderson's question. The earnings of pipe lines as stated by the first witness in front of this committee had averaged in 1938, Mr. Cox, 28 percent; was that right?

Mr. Cox. I think that there were one or two pipe-line companies for which that was the average.

Mr. BERQUIST. That was the average.

Mr. McCONNELL. Of 18 major pipe lines they averaged 28 percent in 1938.

Mr. BERQUIST. That is correct.

Mr. McCONNELL. How did that figure of 28 percent earnings get by all of us? Why wasn't the Standard Oil of New Jersey more heavily interested in pipe lines and why wasn't there a chance for somebody else to buy an interest in pipe lines on a 28-percent-income basis? Do you want to enlarge upon that, first, as to the definition of net earnings that was used in that testimony, and, secondly, the question of mortality or amortization of which you have given examples of pipe lines here that do not appear in your annual earning statements?

Mr. FARISH. Yes; I will be glad to. I have a paragraph in my summary that we skipped on that subject.

In regard to pipe-line earnings, one further point should be made. Earnings are not in fact so high as they were made to appear by the method used by the Department of Justice. It appears from table 22 in "Exhibit No. 1139"¹ that the Department of Justice calculated a percentage rate of return which used "net investment" as the base. This term "net investment" was defined as "the investment in carrier property after depreciation." This basis unfairly excludes some of the assets of the pipe-line companies; the total current assets, for example, are omitted, although they are surely part of the business. How may a pipe-line company get along without operating oil stock necessary for operation, warehouse material and supplies, and a working cash balance, just to cite some major items?

Mr. BERQUIST. How much do those items amount to, Mr. Farish?

Mr. FARISH. Do you mean all the pipe lines in the United States?

Mr. BERQUIST. Speaking generally on an average.

Mr. Cox. Let's take a specific case. Have you made any computations of a specific case which would include those items?

Mr. FARISH. No; I haven't.

Mr. Cox. We made one at the noon interval about the Ajax pipe line, since that was discussed before the committee rose, and while it isn't typewritten now in a form to offer, I shall reserve the right to offer it later.² Our computation which, of course, is subject to correc-

¹ Hearings, Part 14-A, p. 7796.

² Introduced infra as "Exhibit No. 1326"; appears in appendix on p. 9952.

tion, is based on figures which were obtained from the Interstate Commerce Commission, and it shows that the average rate of return for that period, 1931-37, on an annual basis was 25 percent. So, in that case, it really wouldn't make a great deal of difference.

Mr. FARISH. I agree with you.

Mr. McCONNELL. What was the obsolescence figure?

Mr. Cox. We didn't use any.

Mr. McCONNELL. What is the obsolescence in the Ajax pipe line now? Is there any value left?

Mr. FARISH. At the moment the obsolescence is pretty complete.

Mr. McCONNELL. Has that been reflected in these earning figures?

Mr. FARISH. No.

Mr. BERQUIST. The accrued depreciation as of 1937 is found at a half million dollars but that has not been taken out of the investment. It is the total investment before taking that out.

Mr. Cox. He took that out of the capital investment.

Mr. McCONNELL. There is no reason for us to believe that Mr. Farish or anybody else would go into the pipe-line business and make 28 percent on it. That isn't a true reflection of the business.

Mr. Cox. I can't argue it. All I know is we took the figures from the Interstate Commerce Commission and made the computation. Whether that money was in fact earned or not is a matter beyond my knowledge.

Mr. FARISH. I don't think there is any argument, gentlemen, on the question that on the whole pipe-line rates have been probably high, earnings have been high, but at the same time I tried to explain this morning one reason why those earnings were high, and that is because the owners of those pipe lines are in the main owners of the production that is gathered together at one end and furnished to the pipe lines, and owners of the refiners at the other end that take it out and prepare it for the market. In other words, it is a system that is nurtured, both at the point of origin and at the point of delivery, and to measure pipe-line earnings cold-bloodedly on the net investment in a pipe-line system does not tell the whole story.

I would say without any hesitancy that the oil-pipe-line earnings in the United States today are high, that they would approximate the figures that Mr. Cox has just quoted here, in individual cases. You can build a pipe line, for instance, of twenty or thirty thousand barrel capacity today, and under our system of conservation that is prevailing in the oil fields today, you know you are going to have a reasonable life for that pipe line, you know you are going to have production to keep it at maximum capacity for a definite length of time, the actual movement of oil through that pipe line is so low in cost that the net profits on it are going to be high, and those instances stand out. We have got them in the pipe-line business, there isn't any question about it.

All I was trying to devote my attention to, and I have tried to give you in this paper an illustration, a particular illustration of a pipe-line company that I was largely responsible for building, that was built on the thesis generally that we couldn't afford to take the risk and borrow the money to build it unless we got high profits out of it. Now over the years the profits have come down to where I consider them reasonable on that investment.

Now there is a multiple system of pipe lines, servicing the entire State of Texas and Southeastern New Mexico, handling a volume of business of some four hundred to four hundred twenty thousand barrels a day, and the earnings of that system today are of the order of 11 percent.

Now I don't argue for a minute, and I don't think anybody does, that there are some individual pipe-line investments that have high earnings, if we look at 20 or 25 percent, but I do argue that there is no pipe-line system in the United States that is stable at those earnings if it is divorced from the feeder at one end and the taker-out at the other end.

Mr. Cox. If I understand your point correctly on that, Mr. Farish, and I want to make sure I do, it is that the enterprise of conducting a pipe line would be very much more hazardous if you did have divorcement, that you couldn't be sure of your supply of oil at one end of of your market outlet at the other end.

Mr. FARISH. That is correct, that is the point I am trying to make. It is simply another consideration to take into account when you look at an operating pipe-line system. We have the illustration, to go back to it, of the Ajax line at the present time. There are plenty of putter-ins so far as Oklahoma is concerned but no takers at the other end because Illinois is there and the market is taken away from most of them, and no matter how willing the owners of that line are to have it used, it just is economically impossible to use it and we can't use it to move crude.

Mr. Cox. Would you say as a general proposition, Mr. Farish, in considering whether or not the present rate of return on pipe lines was a fair rate of return for a public utility, any consideration should be given to the question as to whether or not, or how much of the capital originally invested in the line had been paid out in dividends? Do you understand that?

Mr. FARISH. Yes; I understood it, but it raises a large question. I think the only fair basis of making rates is on the basis that the I. C. Commission follows with regard to pipe lines. I would go a little further than they do. We don't accept their rates as fair and we don't think that they include some property that is owned by the pipe line that is used and is necessary to the operation of the pipe line and which they should take into account in making rates.

Mr. Cox. May I conclude from your answer, then, that if the Interstate Commerce Commission in determining what is a fair rate ignores the facts with respect to how much of the original investment has already been paid in the form of dividends, you think that is a correct method?

Mr. FARISH. I do.

Mr. Cox. And on the other hand, if they should take that circumstance into account in fixing a rate would you think that that was a fair thing for them to do?

Mr. FARISH. If they should take the amount of money returned?

Mr. Cox. Yes.

Mr. FARISH. No; I shouldn't think it would be a fair way.

I have nothing else on that subject.

Acting Chairman HENDERSON. I would suggest, Mr. Farish, although the committee attendance at these oil hearings has been grati-

fyngly larger than at any previous ones, in view of the small number here this afternoon and the known interest of the other members of the committee, particularly the chairman and the vice chairman, that some part be reserved for tomorrow, if that would suit your convenience.

Mr. FARISH. It suits me very well, sir. I have tried not to delay it. This can be off the record. I have tried to prepare a discussion of some of the subjects that I think are the most important subjects in connection with this whole hearing, and I will be glad to make whatever contribution I can make to an understanding of that situation.

Acting Chairman HENDERSON. I can't be here tomorrow because of an oral argument in which the commission of which I am a member must sit, but since this is the only opportunity, I would like just one small line of questioning.

STATEMENT BY MR. HENDERSON

Mr. HENDERSON. In the first place, I would like to say for the record that some observers and writers have thought they detected an unusual amount of vigor in the questions that were addressed to the witness. I can't hope to allay all the suspicion about that, but I think it ought to be noted that the very nature of this hearing required a committee of this type to subject the witness to cross-examination in order to adduce the facts.

This industry very graciously responded to the suggestion for this type of hearing, which is different from our other industry presentations, and there was an uneasiness lest there be a glossy picture of this industry presented without any review or examination by the committee. I think the record will be much more illuminating because of the questions, and that no small part will be due to the vigor of the questioning. If I were on your side of the table, Mr. Farish, I would feel that the distillate that comes out of this type of hearing is much to be preferred to the kind that comes from a mere presentation of unquestioned statements.

I said off the record, and I should like to say again, that I think your continued presence at these hearings in an attempt to meet the criticisms that were leveled against the industry is to be commended. I believe that in the study of the industry we are far ahead because of that and because of the presence of your fellow Institute members.

I have just a few lines of questioning, and I have no prepared summary. As we have observed, many of the members of the committee make their speeches here. This may be mine.

As I see it, the argument of this industry is that because of its efficiency there is, and there is likely to be for some time to come, a fairly wide field of opportunity for the retailer at the retailing end and for the adventurer, the individual, the entrepreneur at the prospecting end. From the very fact that a large amount of capital is required for entrance into this industry and from the claimed advantages of integration, it seems that we can look forward to no great diminution in the concentration of ownership and control of pipe lines, refineries, proven reserves and perhaps, some of the other lines which we haven't touched in this hearing. It seems also that many of the witnesses

have felt that since integration has evolved as a predominant factor in this industry, it should remain unquestioned as a form of business organization.

May I point out some of the general characteristics of this gigantic industry which seem to me pertinent. There seems to be no doubt that there is an increasing stability in crude prices by virtue of a price leadership which, it has been argued, does not derive from any concerted action which is *flagrante delicto* so far as the antitrust laws are concerned.

Undoubtedly there is a community of interests in the industry by virtue of a rather general acceptance of various practices. The Iowa plan, for example, while not universally accepted, permeates the industry. In a number of cases, accounting practices and restatements of stock have seemed to appear almost simultaneously in various companies following the logic of events.

It seems definitely that conservation, proration, and unification measures are on the increase and are likely to place a growing amount of resources in the control of operating companies. This is my own observation. Even if in the future a large field similar to East Texas should be discovered, undoubtedly State legislation would follow rather quickly which would have as its aim some conservation or stabilizing effort.

It seems to me, then, that in this industry there is something decidedly different from the commonly accepted ideas of what produces free and complete market competition. And I seem to sense running through the testimony a feeling that some of the business policies complained against are somewhat directly affected by the concept of competition which exists in this country, by our laws relating to competition, and also by the existing laws regulating the oil industry. I believe that the sooner the essence and the realities of this industry are understood, the sooner its problems can be dealt with on the one hand so far as business policy is concerned and on the other so far as governmental policy is concerned.

For my part, I have not discussed this with any members of the committee, but I think we are further along toward acceptance of these realities as a result of this hearing.

I warned you this would be a speech.

If you desire to comment, Mr. Farish, I would be glad to have you do so.

MR. FARISH. Well, I don't think comment at this time is appropriate, Mr. Henderson. I covered most of the points that you make as to some phases of your statement in the paper and we can go into them tomorrow. I think in the main your summary of opportunities for the small man as outlined in the beginning of your statement is correct. I differ slightly in some of the inferences that you draw. Otherwise I will comment on that tomorrow.

Acting Chairman HENDERSON. We will adjourn until 10:15 tomorrow morning.

(Whereupon, at 4:35 p. m., the committee adjourned until 10:15 a. m. on Wednesday, October 25, 1939.)

INVESTIGATION OF CONCENTRATION OF ECONOMIC POWER

WEDNESDAY, OCTOBER 25, 1939

UNITED STATES SENATE,
TEMPORARY NATIONAL ECONOMIC COMMITTEE,
Washington, D. C.

The committee met at 10:30 a. m., pursuant to adjournment on Tuesday, October 24, 1939, in the Caucus Room, Senate Office Building, Representative Hutton W. Summers presiding.

Present: Senator O'Mahoney (chairman); Representative Summers (vice chairman); Senator King; Representatives Reece and Williams; Messrs. O'Connell and Brackett.

Present also: Representatives Mapes (Michigan) and Disney (Oklahoma); Quinn Shaughnessy, representing the Securities and Exchange Commission; Robert McConnell, representing the Department of Commerce; Hugh Cox, W. B. Watson Snyder, F. E. Berquist, and Christopher Del Sesto, Special Assistants to the Attorney General; Leo Finn and Roy C. Cook, Department of Justice.

The VICE CHAIRMAN. The committee will please come to order.

Are you ready to resume, Mr. Farish?

MR. FARISH. Yes, sir. Mr. Chairman, we proceeded in the discussion to the point where we reached the question of the problems of crude oil, prices and conservation. If it is agreeable, I would like to pick up the testimony at that point.

(Senator O'Mahoney assumed the Chair.)

TESTIMONY OF WILLIAM S. FARISH, PRESIDENT, STANDARD OIL CO. (NEW JERSEY), NEW YORK CITY—Resumed

CRUDE OIL, POSTED PRICES, CONSERVATION

MR. FARISH. There has been much discussion of the related problems of the price of crude oil and the control of crude production. I think that I am in a good position to try to clear up some of these matters for the committee. I have had a great deal of experience with the problems of crude oil and crude-oil prices, first as an independent producer in Texas and later as president of the Humble Oil & Refining Co. In my present capacity as president of the Standard Oil Co. (New Jersey), I am not so directly concerned with these problems, because crude oil is bought by our subsidiary and affiliated companies, and the job of determining the prices that they will pay for crude oil rests definitely on them. I am, however, familiar in a general way with the policies which they follow.

In the testimony which the committee has heard, there has been considerable criticism of crude-oil prices. The large oil companies

are accused both of forcing crude prices up and of forcing crude prices down. Both of these accusations are false. Crude prices move up and down because of competitive conditions, not because of any collusion among oil companies. If there was any conspiracy among the large oil companies either to ruin independent producers by low prices or to ruin independent refiners by high prices, the executives of the Standard Oil Co. (New Jersey) certainly would have knowledge of it. I can assure you that no conspiracy exists for either of these objectives or for any others.

I enter here into a discussion of posted prices, because it seems to me that there hasn't been a clear-cut understanding of what is meant by posted prices. It may be a little dry, but I think it is an important thing for the oil industry, and I would like to read it, and then have any questions if it is not clear.

Some of their suspicion of conspiracy develops from failure to understand the posted-price system. The posted-price system needs a careful explanation, because it is a system which well suits the peculiar economic and technical needs of the oil industry but is not a system of price protection that is suited to the needs of other industries. The entire industry would oppose any tampering with the system, however much dissatisfaction there may be with the prices themselves.

Crude prices are posted by the purchasing interests in the oil fields. Sometimes the price is posted by only one purchaser, and the others either buy it at that price or offer premiums or discounts based on it. In larger fields, the prices are posted by several purchasers.

THE VICE CHAIRMAN. Mr. Farish, do you propose later to make explanation of what is meant by "that price or offer premiums or discounts based on it"—will you do that later?

MR. FARISH. Yes, sir; I think that is all covered in my summary.

The posted-price system has three functions. It serves to tell the producer the price at which the company will take the oil. It serves as a basis for settling with royalty interests, who are also sellers of oil. The royalty interest in a single well may be divided between many individuals. The posted-price system also serves to tell purchasers of oil from an oil merchant (who has bought crude from a producer) the terms on which the merchant will sell. A large oil company has to make thousands of settlements, and some common basis for them all is needed for both equity and economy. The same basis, the posted price, is used for settlements with both large and small sellers and purchasers.

The posted-price system of quoting prices has no necessary connection with either monopoly or competition. If either the buying or the selling of the crude oil produced in the fields were concentrated in a single hand, the monopolist might post a price. He might also make contracts for long-term deliveries. A monopolist might post the same price for all or he might discriminate among his sellers or customers. The system of quoting posted prices in the oil fields may have some slight effect on crude prices, because almost everything that happens in the industry and even outside the industry may have some effect on crude prices. But if the posted system is not necessarily connected with either monopoly or competition, the peculiarities of this method can best be understood by studying the system as it exists under competition. Under the posted-price system the purchaser or-

dinarily stands ready to take all the production which a producer may legally obtain. Usually a large purchaser does not find such rapid changes in his requirements that he has to make short-term increases or decreases in his takings. He sometimes has to do so, and always reserves his right to do so.

The emphasis placed upon the fact that in some fields there is only one or only a few purchasers is entirely unwarranted. The fact is, of course, true, but it has little or no economic significance. All of the oil wells of the United States are really a part of a common market, and the United States market is only part of a world market. In the whole market there are many buyers and many sellers. In the testimony before the T. N. E. C. there is abundant evidence that there are many economic interconnections between the various petroleum markets. In effect, then, the posted price system brings the world market to the door of the smallest well.

Of course, the various parts of the world market are not always in precise alinement. The very effects of the slight inequalities between markets are part of the process by which those inequalities are constantly tending to disappear.

The policy of the purchasing subsidiaries and affiliates of the Standard Oil Co. (N. J.) is to treat all fields and all customers on an equitable basis. This means that in all oil fields in which they buy, prices are posted that reflect, so far as competitive conditions will permit, the relative value of the crude at the refinery, taking into account transportation from field to refinery. That policy seems to be the only appropriate one for a company of large size.

Another possible system of quoting prices would be that of long-term contracts with a stated price. As there would have to be many such contracts, they would overlap one another. With overlapping contracts some of the various producers might find themselves receiving less for crude than their neighbors. This would cause great dissatisfaction. It is, of course, true that the producers would, under a fixed-price contract, be protected against a price decline as well as deprived of the chance of a price advance. Others may think that the producers should not undertake the risk and should seek the security of a fixed-price contract; but the independent oil producer wants to decide such matters for himself. Under a fixed-price contract, the oil producer would be able to change connections less often and would be unable to get the premiums which may appear in a strong market. Under contracts, the independent producer would know less about his market.

The public posting of prices destroys the secrecy of a contract system, brings about a considerable amount of uniformity in the prices posted by all producers for similar crudes (when consideration is given to transportation and other costs of reaching the common market), and gives the same price to both large and small.

Another suggestion advanced is that crude oil be exchanged on an organized market like that for cotton or wheat. These organized commodity markets are primarily adapted to seasonal crops. Such markets, furthermore, show marked instability of price, and there is genuine doubt as to whether the wide price gyrations which frequently occur on them are wholly advantageous from a social standpoint. The disadvantages of such an organized market for crude

petroleum seem large; certainly no one in the industry desires to have such a market. No one showed any interest in gasoline contracts when an attempt was made to establish trading in them on the New York Commodity Exchange.

That is an attempt, gentlemen, to picture to you what the posted price system of buying oil means, both to the seller and to the buyer. It is in effect a contract. The buying company posts a price in a certain field and the producer signs what is known in the oil country as a division-order contract, which is a contract to accept the market price daily for his oil as run in the line, subject to cancelation at any time on his part. And the effect of it is that the buying company pays the small royalty owner, who may be producing 2 barrels of oil a day, practically the same price that he pays the large producer that may be producing 5,000 barrels of oil a day. And it has grown up as a custom in the business, not only as a most equitable and fair basis for buying crude, but also as the most convenient. A buying company, for instance, a large buying company, may have as many as 20,000 different accounts on its books, that it buys oil from every day under that system and the book entry ledgers are just the same as deposits in the bank.

The CHAIRMAN. Does the fact that the large integrated company has its own large resources of petroleum, of crude petroleum, in any way affect it?

Mr. FARISH. I don't think so.

The CHAIRMAN. It doesn't have the effect of putting the integrated refinery purchaser in an advantageous position over the refinery purchaser who does not have such resources?

Mr. FARISH. I shouldn't think so, Senator. A posted price system is an orderly method of purchasing oil.

The CHAIRMAN. Do you want the committee to understand that, in your opinion, it works as a result of the law of supply and demand?

Mr. FARISH. I get into that a little later, if you would like me to go into it, but, in general, I would say, "yes."

The CHAIRMAN. You have stated here—

The policy of the purchasing subsidiaries and affiliates of the Standard Oil Co. (N. J.) is to treat all fields and all customers on an equitable basis. This means that in all oil fields in which they buy, prices are posted that reflect, so far as competitive conditions will permit, the relative value of the crude at the refinery taking into account transportation from field to refinery.

Am I to understand that that means that the posted price is an accurate reflection of the value of crude at the refinery, to the refinery, at the time the purchase is made?

Mr. FARISH. Yes, sir.

The CHAIRMAN. Do not these factors of reserve enter into that determination?

Mr. FARISH. They have no bearing whatsoever.

The CHAIRMAN. None whatever?

Mr. FARISH. None whatever.

The CHAIRMAN. If refinery stocks are up, the demand from the refinery for crude is down, is it not?

Mr. FARISH. It might be and it might not. Most refineries run on a form of schedule and they let their stocks fluctuate up and down seasonally, without affecting their purchases. To put it another way,

once you assume an obligation of purchaser to a producer, that obligation becomes pretty well fixed, too, and as long as he legally produced the oil, the purchaser buys it.

The CHAIRMAN. If refinery stocks were down, for example, then the natural result would be, I would imagine, that the refiner would want oil.

Mr. FARISH. Yes, sir.

The CHAIRMAN. And would be likely, therefore, to pay a better price for the oil.

Mr. FARISH. He would if he thought he could get more oil by doing it, probably.

The CHAIRMAN. Yes; if he needed the oil. But if his stocks were up, his natural tendency would be to pay a lower price.

Mr. FARISH. I don't think the problem can be simplified that way.

The CHAIRMAN. This may have been the case before the pipe lines were developed to the extent they are now developed and when storage was being used to a greater extent than it is now being used, but I think it was frequent that one heard the complaint that the price of crude would be manipulated according to whether or not the refinery stocks were up or down, and that the large refineries or the integrated refineries—

Mr. FARISH (interposing). I know what you are talking about, but may I make it a little clearer?

The CHAIRMAN. Surely, you are just the man to make it clearer.

Mr. FARISH. When you speak of refinery stocks, I don't think you quite mean that. In the old days, and I expect to get into that a little later on if you want me to tell that story—but in the old days before we had conservation or orderly production, there was no limit on production. In other words, every producer was trying to produce his oil, as much oil as he could before the other fellow. It was a case of legalized stealing taking place, to put it one way. But it was perfectly legal for me to produce all the oil I could out of my property, even though it was your oil, as long as it came out of my well. And under those conditions our oil fields would produce very rapidly and the surplus always went into storage.

In the rapid development of new oil fields, there was always large increase in oil that went into storage. In those days the price went down. Sometimes it went down to a very low figure because the buyer had to build tanks to put it in, and so on, and he thought, "Here it is cheap and I am going to buy it as cheap as I can."

Now, if we had no flush fields and the storage is full, in the old days the price would go on up and the fellow that had bought it at a low price would try to get a high price for oil in storage. That system, or that principle, or that custom, if you will, is out of the argument today.

The CHAIRMAN. That, of course, was the situation which existed when tank cars were being extensively used. They are not being so extensively used now?

Mr. FARISH. That situation existed up to about the year 1926.

The CHAIRMAN. Does not the modern refiner still have on hand a stock of crude oil?

Mr. FARISH. Very modest stocks today, though, throughout the whole industry.

The CHAIRMAN. What do you mean by a modest stock?

Mr. FARISH. Well, most companies are operating on 50 or 60 days' storage.

The CHAIRMAN. Fifty or sixty days' storage?

Mr. FARISH. Some of them as low as 30; in the recent shut-down in Texas some of them as low as 10.

The CHAIRMAN. And then you say that that amount of storage is not sufficient to have any effect upon the price?

Mr. FARISH. No, sir. As a matter of fact, storage oil today has no effect on prices.

The CHAIRMAN. And are we to understand that in your opinion the price the producer gets is controlled by only one factor, namely the supply and demand?

Mr. FARISH. Well, I qualified that, I think, slightly, Senator, when I—

The CHAIRMAN. We will get to that? All right.

Mr. FARISH. Shall I go on?

Mr. O'CONNELL. I should like to ask a question. In your discussion of the market for crude oil you suggest that it is a really world-wide market and such equalities as exist between one portion of the world and another are, as you put it, constantly tending to disappear. Is that a completely accurate statement if no thought is given to the tariff? Isn't there a tariff on crude oil in this country?

Mr. FARISH. What I tried to convey by that statement, Mr. O'Connell, is this: That the United States today is probably the largest exporter in the world market of crude, as well as gasoline. We ship crude and gasoline off the Pacific coast to the Far East, and we ship crude and gasoline from the Gulf coast to Europe, and the market that is now the controlling market in affecting oil prices today, or in affecting contracts for the purchase of crude in the world today, is the Texas Gulf coast market for East Texas crude; that is what I mean. It has an interrelated—if I can clear the point—effect on our markets here. In other words, substantially it is just as I have stated in the paper, the producer that gets a posted price for crude as determined today gets the world-market value of his crude less a certain differential of cost and manufacture to get it to market, brought right back to his well.

Mr. O'CONNELL. Now there is a tariff, is there not, on crude oil?

Mr. FARISH. Tariff on imports.

Mr. O'CONNELL. On imports, of course.

Mr. FARISH. Yes; into this country.

Mr. O'CONNELL. How substantial is it, do you know?

Mr. FARISH. Twenty-one cents a barrel.

Mr. O'CONNELL. Do you think that that import tariff has anything to do with the price of crude in this country?

Mr. FARISH. In this country; no.

Mr. O'CONNELL. It wouldn't make any difference if we had no such tariff on crude?

Mr. FARISH. No; I wouldn't put it that way. I thought you meant as it was operating today. If we had no tariff on imports in this country the tendency would be for some South American oil to compete with domestic oil.

Mr. O'CONNELL. And that would in all probability have its effect on price?

Mr. FARISH. Yes, sir.

Mr. O'CONNELL. In the way of a price reduction?

Mr. FARISH. I think it would have its effect. You understand—I think it is in the record—I am not sure it is in the record—but tariffs or imports of crude—there are no imports of products to speak of to this country of gasoline or other oils, except fuel oil, and the imports of fuel oil are almost all confined to what is known as bonded fuel oil which goes direct into ships in foreign trade, free of duty. That is under the theory those ships could take their bunkers outside of the United States as well as they could take it here. It is just a matter of convenience; they could take it here in the United States.

The amount of imported oil that is actually used in this country and refined as crude oil is relatively small. I have got the figures; I haven't them readily in mind but they are quite small, and the oil that is imported today is imported primarily for special products, the manufacture of asphalt primarily, heavy oils that are converted into asphalts.

Mr. O'CONNELL. Is it a type of oil not found in this country?

Mr. FARISH. There is a little found in this country of a similar type, not exactly similar but quite similar, some in Texas and some in California.

Mr. O'CONNELL. On the surface, it seemed to me a little peculiar that we would be one of the largest if not the largest exporter of crude oil, and at the same time have a 21-cent-a-barrel tariff on the import of crude oil. Apparently in general we are in a position to compete in the world markets in our export trade.

Mr. FARISH. Yes.

Mr. O'CONNELL. Without the benefit of such a differential, yet on the other hand there is a tariff barrier to the extent of 21 cents a barrel to protect the oil producers in this country against imports.

Mr. FARISH. That is correct; that is the effect.

Mr. O'CONNELL. Is there something anomalous about that?

Mr. FARISH. That is the effect of that tariff. Is there anything anomalous about it? In theory, yes; but that is a much-debated subject within the oil industry and it is a much-debated subject within Government circles here in Washington, and I will be glad to talk on it, but I don't think it would add anything to this record. I would say for the benefit of the record, however, that my company, being both a producer in the United States and a producer in South America, is taking a neutral position on it. We have never taken a definite position on it one way or the other. We have left it to the Government authorities and producers to settle without taking sides.

The VICE CHAIRMAN. Would you mind putting into the record, if it is not already in there, how much oil and gasoline we export, less the amount we import, as the first amount is related to our total production? Could you put that into the record?

Mr. FARISH. Let me get the figures of your question.

The VICE CHAIRMAN. The proposition is—

Mr. FARISH (interposing). How much oil do we export?

The VICE CHAIRMAN. Yes. How much oil do we export; that is, crude oil and gasoline, and I think probably the first figure would be, if we want to put them close together, how much do we produce, how much do we import, how much do we export.

Mr. FARISH. I will be glad to put the exact figures into the record. I can state now approximately what they are.

The VICE CHAIRMAN. I think that would be sufficient.

Mr. FARISH. We produce in this country an average of about 3,400,000 barrels of crude oil daily. We export from this country a total of about 475,000 barrels daily of crude and products—that is inclusive. The amount of gasoline that we export from this country I am sorry I can't give you the exact figures on, but we import into this country, total including bonded fuel oil that is not used in this country, that goes on ships in foreign trade, I think the average is around 150,000 barrels.

The VICE CHAIRMAN. That is, including the oil that is imported in bond?

Mr. FARISH. Yes, sir; that is the total.

The VICE CHAIRMAN. Can you break that figure down?

Mr. FARISH. I will. I can't break it down from memory.

The VICE CHAIRMAN. But you will do it?

Mr. FARISH. And I will break down the exports for you and insert them in the record.

The VICE CHAIRMAN. May I ask one other question? In reference to these figures that were given yesterday with reference to the earnings and losses of the four Standard Oil organizations, is there any explanation as to why the Standard of New Jersey consistently was in the black during all the years from '28 to '37, inclusive, while the other companies were frequently in the red?

Mr. FARISH. Yes, sir. I tried to make that clear yesterday.

The VICE CHAIRMAN. Did you? Then I withdraw the question.

Mr. FARISH. I will be glad to answer.

The VICE CHAIRMAN. No, no; I don't want you to.

Mr. FARISH. I think it is in the record.

Representative WILLIAMS. I get the impression from what you said that there is a rather constant flow of crude oil to the stills. Purchases are rather fixed and constant from time to time.

Mr. FARISH. Yes, sir.

Representative WILLIAMS. How about the price, the posted price? Is the posted price changed frequently, and, if so, how often.

Mr. FARISH. The posted price over a period of years does change frequently, certainly.

Representative WILLIAMS. About how often and to what extent? I don't mean to go into all the details of it, but just a picture of it.

Mr. FARISH. I will let you look at this chart and then if you want to ask me any questions I will be delighted to try to answer them. Here is a record of crude-oil price changes posted by our companies going back to 1919.

Representative WILLIAMS. Tell us, just in your own way, what it shows.

The CHAIRMAN. Did you say these were posted by your companies?

Mr. FARISH. Yes, sir.

The CHAIRMAN. How do these prices differ from the prices posted by other companies, if there were any such?

Mr. FARISH. Can we take up one part at a time?

The CHAIRMAN. Yes, indeed.

Senator KING. I suggest that you answer Mr. Williams' question first, and then the chairman's question next.

Mr. FARISH. Thank you, Senator. That is what I was going to try to do.

Where do you want to begin on this?

Representative WILLIAMS. Take the last 3 or 4 years. I don't want the entire history of it; no. Take the general trend of it.

Mr. FARISH. Suppose we begin with East Texas, because since East Texas has more or less dominated the crude-oil prices.

Representative WILLIAMS. I was going to ask you whether there were different prices posted in different fields at the same time.

Mr. FARISH. Certainly.

Representative WILLIAMS. Why is that?

Mr. FARISH. I read a while ago that the price-posting policies of our people are bound to differ because the quality of the oils differ, and the worked-up value at the refinery differs, and the transportation cost from location to refineries differs.

Representative WILLIAMS. That is taken into consideration, isn't it, the transportation cost?

Mr. FARISH. Taking all factors into consideration. If you take all factors into consideration, the efforts to post prices is to post prices of an equal value.

Representative WILLIAMS. I perhaps didn't understand you when I thought you said the price was fixed as of the value at the still.

Mr. FARISH. At the refinery.

Representative WILLIAMS. We call it a still about half the time.

Mr. FARISH. I am not critical. I beg your pardon. The point is this, Mr. Williams. We will say one oil field is 15 miles from a refinery. We will assume it has the same gravity and the same quality of oil of an oil field 200 miles away. The cost of getting that oil to the refinery varies between those two fields, and therefore that differential is taken into consideration. Now, if we take another oil field 300 miles from the refinery, and you have got a different quality of crude, you bring the transportation cost differential in, and also you bring the quality differential in, therefore, you get another discount in order to post the price at that field.

Representative WILLIAMS. In other words, the transportation costs are figured from posted price.

Mr. FARISH. Yes, sir.

Representative WILLIAMS. Well, I had it just turned around.

Mr. FARISH. I am sorry; I thought I made that clear.

Representative WILLIAMS. All right; that explains that, and then, of course, the different grade of crude.

Mr. FARISH. Yes, sir; different quality of crude.

Representative WILLIAMS. Would account for posting a different price, of course, in the different fields.

Mr. FARISH. Yes, sir.

Senator KING. I assume, Mr. Farish, that the production costs in some fields where they have gone to great depth and encountered many difficulties, geological and otherwise, would be quite different from the price, the cost of production in shallow fields where they encountered no geological or other difficulties.

Mr. FARISH. Yes; but in posting prices, Senator, there is no consideration taken of cost whatsoever. It may cost one man \$3 a barrel to produce oil that he is selling for \$1 and another man 50 cents

a barrel; but we as a buyer trying to establish a level of prices under which we will purchase oil from 20,000 different people and do equity and do fairness to those people, must establish a price basis that does that in our minds, at least, that we think is fair.

Senator KING. Regardless of the cost of production.

Mr. FARISH. Regardless of the cost of production or regardless of the individual involved, whether he is a royalty man producing 2 barrels or a producer producing 1,000.

The VICE CHAIRMAN. Mr. Farish, I refer you to the statement on page 21 in your summary statement, "Crude prices are posted by the purchasing interests in the oil fields. Sometimes the price is posted by only one purchaser, and the others either buy it at that price or offer premiums or discounts based on it." Is there any rule or custom under which in such a situation one purchaser's posted price is used by the others?

Mr. FARISH. No; and that is an exceptional case, Mr. Sumners, that I speak of there. In describing this posted-price system, I am simply trying to give you a picture. I don't know of a case where today any large purchaser, reputable purchaser—by reputable, I mean a large company with credits and established relations with its customers—posts a discount off somebody else's price. He takes the responsibility of posting his own price.

The VICE CHAIRMAN. That is sufficient explanation. Thanks.

Mr. FARISH. There are rare exceptions, and that is the reason it is in this statement, because I have given you the complete range of purchases.

The CHAIRMAN. What in your opinion would be the most desirable price structure, or the most desirable way of affecting price structure? I use the word "affecting" because I don't want to use the word "controlling," I don't want any implication that would be unfavorable, but prices of course are a very important factor in all enterprises, in all commercial businesses.

Mr. FARISH. May I suggest, Senator, you let me come to that a little more orderly?

The CHAIRMAN. Of course these questions of mine were in my mind.

Mr. FARISH. I appreciate it, we jumped a little ahead of the procession, if you will permit, and I have gone to great length and I have really gone to considerable effort to answer that question for myself, and having answered it for myself, I am prepared to suggest it to this committee and to the American public. That is what I am trying to do.

Representative WILLIAMS. Mr. Farish, I don't believe we ever did get the question I was somewhat interested in answered. We have got far afield from it.

Mr. FARISH. I will do my best.

Representative WILLIAMS. Of course; you were proceeding to do that when perhaps I interrupted you in the first place: The variation in posted prices over a period of time by your company. You started in to make that explanation for your company first and then the Senator wanted to know about other companies.

Mr. FARISH. If you will look at the chart that you have before you,¹

¹ "Exhibit No. 1324," appendix, facing p. 9951.

if you will look at east Texas, it goes back to 1931. As I read the chart, the first price posted for east Texas crude was 60 cents a barrel. That was early in 1931. It was during the month of March. In June the price went down. In July it went down a little further to where it reached 10 or 15 cents a barrel. In September the price moved up, reaching again about 65 cents a barrel for the end of September, and in November, about November 1, it went up again to probably 80 or 85 cents a barrel. It held at 85 cents a barrel through into the next year, 1932, in April. Again early in March it moved up to about 95 cents or \$1 a barrel. It held to that price through the months to January of 1933. In January 1933, if you look, it took another nose dive, reaching another low of around 10 or 15 cents a barrel.

Representative WILLIAMS. In that connection, what was the cause of that, just briefly?

Mr. FARISH. The cause of it was a break-down of conservation efforts and the field was without any restriction whatsoever. And if you notice the chart, Mr. Williams, on other grades of crude, they were all affected by the east Texas price, not as severely but they all fell to low prices at the same time.

The CHAIRMAN. To have that clear, the cause of that nose dive, as you described it, was the break-down of conservation efforts.

Mr. FARISH. The break-down of conservation efforts. Then, along came the code, the N. R. A., and under the code and under the influence of Federal authorities, conservation was reestablished in the east Texas field.

The CHAIRMAN. What was that date?

Mr. FARISH. That was in the fall of 1933; starting along in July.

The CHAIRMAN. That was the result of the code?

Mr. FARISH. That was the result of the code.

Senator KING. Government compulsion?

Mr. FARISH. Yes, sir; if you want to put it that way I think it was, because certainly the administrator of the code was a member of the Cabinet and he was the chief final decision on oil matters at that time.

The CHAIRMAN. Well, of course, that wasn't exactly the theory on which it was operated. Those who entered into the code wrote the code and submitted it to the Government for approval.

Mr. FARISH. I beg your pardon, sir; I don't think that is exactly correct.

The CHAIRMAN. I wasn't familiar with it at the time.

Mr. FARISH. The code adopted was changed after I approved it.

Mr. Cox. Mr. Farish, whatever the fact may have been about the code, it would be a fair assumption that that rise in price that you spoke of at this time was not the result of what you might describe as natural economic forces but was brought about by governmental action; is that right?

Mr. FARISH. Right. It was brought about by effective conservation. The stoppage of wild, reckless production in east Texas.

The CHAIRMAN. From your point of view, was that desirable or undesirable?

Mr. FARISH. Thoroughly desirable, sir.

The CHAIRMAN. So that as far as that goes it was a Government compulsion which you approved?

Mr. FARISH. I have been an advocate, sir, of conservation from the beginning and in this case the State authorities were given the

help and aid of the oil administrator in bringing about orderly production in Texas, and that was the cause of the recovery in price.

The CHAIRMAN. Well, it wasn't clear to me from your answer to Senator King whether you approved or disapproved this action. I thought there was a little implication in the words you used of a critical attitude toward the effect of conservation, but you don't want—

Mr. FARISH (interposing). No, sir; I am a strong supporter of conservation, a strong supporter of regulated production. I really make quite a speech on it.

Senator KING. I think some of us might differ with your interpretation of what conservation is.

Mr. FARISH. Probably, probably.

Senator KING. I think I should differ from your connotation of that term. Proceed.

Mr. FARISH. Before we leave that particular curve, someone asked from the dias the other day how did the crude price reach a dollar a barrel from this sink. I think maybe that this is an appropriate place in the record to state that. To my knowledge it increased to a dollar a barrel because the President of the United States and the oil administrator had both gone on record that a dollar a barrel was a fair price for crude, and the price was posted of \$1 a barrel largely on the insistence and certainly with the direct approval of the oil administrator.

The CHAIRMAN. And how about the oil industry? What was the feeling of the oil industry?

Mr. FARISH. They were delighted, of course.

The VICE CHAIRMAN. Is it general policy to prevent the accumulation of such a surplus as would interfere certainly with the effort to maintain the dollar a barrel of crude?

Mr. FARISH. I am sorry, sir.

The VICE CHAIRMAN. I say, is there any general disposition throughout the whole field of production and manufacture to hold the accumulated surplus to such a figure to make fairly easy the maintenance of dollar-a-barrel crude?

Mr. FARISH. You mean accumulated surplus above that?

The VICE CHAIRMAN. To prevent an accumulation which would make it difficult to maintain a dollar-a-barrel crude.

Mr. FARISH. The accumulation of stocks above ground?

The VICE CHAIRMAN. Anywhere, whatever would influence the price.

Mr. FARISH. Well, I think this—I will try to answer it this way, if I understand the psychology of the thinking in the oil fraternity today it is along the general lines that somewhere from \$1 to \$1.30 a barrel for 36 gravity crude is a fair price, and there is a general feeling that the trouble is going to be had by somebody if the price goes below that. I think that has been demonstrated by the record.

The VICE CHAIRMAN. Now, my point is—I will put it another way. Could that judgment on the part of the oil fraternity be made effective if production began to accumulate too much surplus?

Mr. FARISH. No.

The VICE CHAIRMAN. Well, that was my question, if there isn't somewhere in the field of production a general effort to hold the

surplus to such a figure as to make the maintenance of a dollar a barrel possible.

Mr. FARISH. That can only be done today under the regulatory authority of the States, to answer your question literally.

The CHAIRMAN. Would that be desirable, from your point of view?

Mr. FARISH. To maintain a stabilized, fair price for crude?

The CHAIRMAN. Yes.

Mr. FARISH. Provided it is done through conservation efforts; yes.

The CHAIRMAN. No other consideration?

Mr. FARISH. Well, I think the—I will try to state my position this way, Mr. Chairman.

The CHAIRMAN. Or is that the subject you are going to deal with later?

Mr. FARISH. I try to deal with that later on, and I am on record, I think, for some 15 years on the question, that I personally don't believe that proration or conservation efforts should be used to fix prices, if that is the point you are driving at.

The CHAIRMAN. I was just trying to develop the idea of how prices should be affected, but we will let that go until you come to it.

Mr. FARISH. I think we will get to it a little more directly.

The CHAIRMAN. Let me ask you about this chart which you have presented to us.¹ I note from the chart that the graphs or the curves as they are called in the terminology of those who make charts, are practically parallel for every field represented on the chart?

Mr. FARISH. Right.

The CHAIRMAN. Now, does that mean that the price of crude oil in every area in which the Humble Oil & Refining Co. was posting its prices was moving along under the influence of the same factors all the time?

Mr. FARISH. Yes, sir.

The CHAIRMAN. I haven't had the time to examine this.

Mr. FARISH. The chart only proves the statement I tried to make clear a while ago, that they tried to quote prices for crude that give relatively equal values at the refinery.

The CHAIRMAN. Now the prices in each field are not the same but the degree of movement is practically identical?

Mr. FARISH. Correct.

The CHAIRMAN. Now, how extensive is the Texas Gulf coast field, which is the lower line?

Mr. FARISH. Well, there is quite an extensive area.

The CHAIRMAN. There are nine different curves on this chart representing nine different fields or nine different areas?

Mr. FARISH. Nine different sections of the State.

The CHAIRMAN. All in Texas?

Mr. FARISH. All in Texas.

The CHAIRMAN. Now, how would those prices compare with prices paid in other areas outside of Texas?

Mr. FARISH. Well, I think you would find a similar trend in all of them.

The CHAIRMAN. And how about uniformity of the price itself?

Mr. FARISH. Not in all of them; I mean in areas tributary to the same market, like Oklahoma, and Kansas.

¹ "Exhibit No. 1324."

The CHAIRMAN. But if the producing areas are not tributary to the same market then there is not as great an identity?

Mr. FARISH. No; you would have a different price chart in California.

The CHAIRMAN. To what extent does the variation appear in the price of crude throughout the country?

Mr. FARISH. Pretty generally the same.

The CHAIRMAN. Are there as great differentials now as there used to be in the prices charged in different fields?

Mr. FARISH. Greater differentials?

The CHAIRMAN. Yes.

Mr. FARISH. No; I think they are less.

The CHAIRMAN. Would you say that the trend is to abolish the differentials and to establish a uniform price throughout the country?

Mr. FARISH. No, oh no; I thought you meant the differentials in movement of prices.

The CHAIRMAN. No, no; I meant the differentials between different fields.

Mr. FARISH. No—well, there is a tendency for them to level out as we go along. There is as more people and more pipe-lines or more users use crude, why there is a natural tendency for interlapping sections to equalize the prices for crude.

The CHAIRMAN. I don't know whether you were here in the room during the testimony on conditions in Wyoming?

Mr. FARISH. I didn't hear that; no.

The CHAIRMAN. Well, briefly it was testified that there are some 16 or 18 fields that are closed in for lack of a market; that there used to be a big differential in the price paid for crude in Wyoming as compared with that paid in the Mid-Continent field; a differential to the disadvantage of Wyoming producers. But that differential later began to disappear with the construction of the pipe-line to the Missouri Valley points; but that recently the differential at least one field to the disadvantage of Wyoming producers is again appearing. Now, I am curious to know what should or could be done to stabilize these prices, if it were as I say, a desirable thing, because both independent producers and the State, which derives a large royalty from public lands, are interested in income from royalties; therefore, interested in maintaining a reasonable price.

Mr. FARISH. Senator, I don't know enough about the Wyoming situation to make any contribution.

The CHAIRMAN. Well, I thought that what would be true anywhere in the oil industry might be true there. Would it be agreeable to you if this should be entered in the record?

Mr. FARISH. Yes, sir.

(The chart referred to was marked "Exhibit No. 1324" and is included in the appendix facing p. 9951.)

The CHAIRMAN. I notice a substantial uniformity in these various graphs. I presume that uniformity in part results from the State control?

Mr. FARISH. No; the State control has nothing to do with the uniformity of movement of prices among the various grades of oil. That uniformity of movement is the principle under which the buying company, in this case the Humble Oil & Refining Co., attempts to measure values.

Senator KING. Well, that uniformity is reflected in the uniformity of prices, is it not?

Mr. FARISH. Yes.

Senator KING. And the action of the State contributes to uniformity of prices.

Mr. FARISH. Absolutely not. The action of the State contributes to the stability of prices, but not to uniformity. It has nothing to do with uniformity.

Senator KING. What I mean is this, that if rates for transportation are too high, appeals are made to the State and the State regulates the transportation charges, and, of course, the transportation costs are an important factor in determining the ultimate cost to the consumer.

Mr. FARISH. To that extent they have an effect; yes.

Representative WILLIAMS. Just another question with reference to this chart. During this period when the price of crude seemed to have fluctuated from 10 or 15 cents a barrel to \$1.35 a barrel, was that fluctuation in the price of crude reflected in the price of gasoline during that same period?

Mr. FARISH. You mean reflected in the wholesale price of gasoline? Yes.

Representative WILLIAMS. To what extent?

Mr. FARISH. If you notice, the price of crude went to \$1.35 a barrel in early 1937, in June 1937 or May 1937. During that period, during the latter part of 1936 and the early part of 1937, the wholesale price of gasoline in the Gulf, which is the measuring stick for these prices largely, was quite high. The refiner's margin was large and the refiner was making good money; every refinery was making good money, therefore the crude price in that particular instance, in my judgment, was a reflection of the market.

Representative WILLIAMS. What would you say as to the retail price.

Mr. FARISH. I think retail prices of gasoline were probably strong, too. I haven't checked it up, but they must have been.

Representative WILLIAMS. In other words, the price of crude determines the wholesale price of gasoline and the retail price?

Mr. FARISH. To some extent, yes, sir; but of course you must remember this, that the price of crude worked back to the price of what the consumer pays for gasoline, your factor of influence there is quite small.

Representative WILLIAMS. I understand that is only one of them, that is only one factor.

Mr. FARISH. But even that one, I say, is quite small. For instance, it will take probably a 25-cent advance in the price of crude to affect the price of gasoline 1 cent. That is just speaking in round terms, round figures.

Mr. O'CONNELL. That is 25 cents a barrel of crude and 1 cent a gallon of gasoline.

Mr. FARISH. One cent a gallon, yes.

Senator KING. The retail price of gasoline varies with respect to the cost of production, the cost of transportation, whether you have to haul it a long distance by trucks, whether you are remote from the field where the refineries are operated?

Mr. FARISH. That is true, Senator, but we are assuming all of those factors level in trying to answer Mr. Williams' question.

Mr. McCONNELL. Is there any crude oil moving to market under posted price in times of oversupply, at a price under the posted price?

Mr. FARISH. Yes, sir.

Mr. McCONNELL. In times of oversupply that becomes a large volume of crude oil moving to market, do you think?

Mr. FARISH. Well, at times it becomes a large volume, and has become a large volume in the last 2 years, even though strictly speaking we might not have had an oversupply based on the balance of stocks in this country.

Mr. McCONNELL. That condition of a large volume of crude oil going to market at a discount under the posted price is a forerunner of a reduction in posted price very often?

Mr. FARISH. Yes, sir; I think that is correct.

Mr. McCONNELL. Conversely, if there is a premium paid above the posted price, that is a condition where there is a supply too small to fill the market, that is a condition precedent to an increase in the posted price?

Mr. FARISH. Yes; that is the established history of the industry.

Mr. McCONNELL. Have you any idea of—on August 1—how much crude oil was then moving to market below the posted price in the Mississippi Valley?

Mr. FARISH. I have accurate calculations on that, if you would like to have them, but roughly, without going to accurate calculations, our people concluded that there was something over, including now the Illinois production as a whole, 600,000 barrels.

Mr. McCONNELL. Then this posted price is not a price fixed; it is subject to supply and demand at all times; is that right?

Mr. FARISH. I think so, unquestionably; and it is subject to the influence of cut-price crude, or premium-price crude on the reverse side.

Mr. O'CONNELL. But to the extent that the posted-price system becomes effective, I take it, it isn't subject to that influence of supply and demand at all, is it? If the reduction in the posted price comes about as a result of secret price cutting or discounts from the posted price, would it not follow that a permissive price structure, based on the posted-price system, would not be so effective?

Mr. FARISH. If those influences weren't there, of course, they wouldn't affect it.

Mr. O'CONNELL. And the major companies attempt to follow the posted-price system.

Mr. FARISH. Certainly they name the price which they will pay.

Mr. O'CONNELL. So that a reduction in price which is brought about by oil being sold at a discount is brought about by conditions outside of the major oil companies.

Mr. FARISH. Some of the major oil companies may be doing some of this cut-price buying themselves.

Mr. O'CONNELL. Would your company?

Mr. FARISH. And the record shows that that is correct.

Mr. O'CONNELL. We have had some testimony here from Mr. Swensrud, I think, and some of the other representatives of the

majors, which was to the general effect that it was the policy of their companies not to buy except at the posted price, and to change the posted price only as a result of outside forces which were offering or which were undercutting their price.

Mr. FARISH. It is the policy of our company and our subsidiaries to buy only at a price they name themselves.

Mr. O'CONNELL. So that if all companies followed the posted-price system without deviation, you wouldn't have the system Mr. McConnell described as existing today, which results in changes in price?

Mr. FARISH. No; you would have all oil moving to market at a relative value—not some moving at a lesser value, a lessor cost.

Mr. O'CONNELL. Well, I would state it to the effect that you would have less of the element which apparently exists to some extent now which forces reductions in price. You would have a more stable, more uniform price, would you not?

Mr. FARISH. You would; certainly. That is what I am trying to say. You would have all the oil moving to market at a relative cost, assuming it is all purchased.

Representative WILLIAMS. Did I understand you to say that your company didn't buy except at your own posted price?

Mr. FARISH. Yes, sir.

Representative WILLIAMS. You don't follow anybody else's posted price at all?

Mr. FARISH. Sometimes we follow it, but we name our price. It may be the same as somebody else's.

Representative WILLIAMS. But you name yours regardless of what somebody else does?

Mr. FARISH. Yes, sir.

Representative WILLIAMS. Do they all follow that policy?

Mr. FARISH. All companies. I think in general that is common in the industry; yes.

Representative WILLIAMS. Of course, there wouldn't be a variation in the posted price among the different companies in the same area?

Mr. FARISH. There is frequently, but it doesn't last very long; no.

Representative WILLIAMS. It will naturally level itself out.

Mr. FARISH. It levels itself out in time. In times of oversupply, though, it might last quite a little while.

Representative WILLIAMS. Well, is there any considerable variance in those posted prices where they do exist?

Mr. FARISH. No; no there isn't.

Mr. McCONNELL. There is quite a large discount at times, though, is there not, of several cents, that makes a difference between profitable and unprofitable operation?

Mr. FARISH. But very seldom in the same oil field is the point of Mr. Williams' question.

Mr. McCONNELL. Oh, yes. But do I understand it is your opinion, Mr. Farish, that this practice of posting prices has the effect of leveling out the price curve, making it more uniform, but has not any effect of raising or lowering prices permanently, that that is governed by the law of supply and demand? Is that your opinion?

Mr. FARISH. That is correct. I have tried to make that clear in the written statement.

Mr. Cox. Mr. Farish, with respect to that last answer, quite apart from the posted prices would you say that since 1933 the level of

these prices as shown on your chart has been simply the result of the operation of the law of supply and demand?

Mr. FARISH. I don't know but what I will have to say yes to that.

Mr. Cox. Do you think conservation measures have had nothing to do with the level of prices?

Mr. FARISH. They regulate supply.

The CHAIRMAN. Did you not testify, in response to an inquiry I made at the very beginning, that the price of oil went up as a result of conservation, that it went down because of the unregulated production of oil?

Mr. FARISH. Yes, sir.

The CHAIRMAN. So that the law of supply and demand is not the only factor that goes into the fixing of prices.

Mr. Cox. I think we are talking about the same thing.

Mr. FARISH. Exactly the same thing.

Mr. Cox. In other words, when a governmental agency restricts production and thus affects supply, Mr. Farish regards that as a part of the operation of the law of supply and demand. I confess that I find the idea a little novel, but I see no objection to his using that form of wording if he cares to, so long as we realize that the effect on supply has been as a result of governmental action, which I take it you and I are agreed upon.

Mr. FARISH. Yes, sir.

Senator KING. And that is a part of conservation?

Mr. FARISH. I don't think there can possibly be any argument.

The CHAIRMAN. The point that impresses itself on me is that Government intervention, Government control, Government compulsion, are all very desirable and advantageous things when they drive the price of oil up, and the industry is very happy to have such governmental intervention in business; but there are other times when Government intervention is something to be wholly condemned.

Mr. FARISH. Senator, I don't want to get into an argument on that question, but you are using Government intervention and Government control in rather a broad term. What we are talking about is the State conservation authorities affecting the volume of crude produced by reason of their orders based on prevention of waste.

Senator KING. You are referring particularly to the proration system in Texas?

Mr. FARISH. I am referring to the regulation of production by the State authorities who are charged with the prevention of waste under the statutes of their local States. That is what I am talking about in government.

The VICE CHAIRMAN. The mechanics of the thing is not to bring to the surface more oil than is required for use prior to the time when waste will begin to operate.

Mr. FARISH. Yes; that is a correct principle. I have a real story on that, if you will let me get to it.

Senator KING. While we have mentioned proration, if you care to express an opinion do you think it has operated advantageously, successfully, in Texas, and do you approve of it?

Mr. FARISH. I do; unquestionably. I think it has operated advantageously and successfully. I don't want to give 100-percent approval to it, but I would like to approve it in principle and approve it

generally with certain qualifications as to the limitations of human relations and political influences and so on.

Senator KING. Which are sometimes very pernicious.

Mr. FARISH. Yes, sir.

Mr. McCONNELL. Mr. Farish, anticipating your testimony to come, this relation of proration to price, if there were no proration, no restriction of production, it seems probable that the price might decline to say 20 cents a barrel immediately, very promptly. If we looked ahead a number of years when that flush had been sold at 20 cents a barrel, do you think the price might be as high as \$1.50 or \$2 a barrel because during that period of flush production and lack of control, there was of necessity closed in and lost a great many marginal producers and the supply of oil has decreased.

Mr. FARISH. I am perfectly willing to get into that discussion right now. I have been trying to get to it orderly. It seems I can't do it, so we will go to it.

Let me start this way. The history of the oil industry shows that since the beginning of oil, the beginning of the commercial use of oil in this country, back in 1865, up to probably 1925, the first of 1925, that is a period of some 60 years, the oil industry operated on a catch-as-catch-can basis. We had no rules, we had no regulations, we practically had no laws to govern it, except the law that was laid down in the early days in Pennsylvania by some judge who was forced to make a decision as to who owned certain property, and he adopted the theory as a rule of convenience that the property was owned by the man who had it in his possession on the top of the ground. That is known as the law of capture.

So that is the basis, that is the principle under which the oil industry operated. In other words, you would get all the oil you can through your hole in the ground, it didn't make any difference whether it is your neighbor's oil or not. That is the only way title could pass. That is the only way you could have a valid title under our laws.

So we operated under that principle up to 1925, and during that period of time we went through periods of plenty when a new field would come in and rapidly develop, and then we went through periods of scarcity when the oil was drawn out of storage, we were busy hunting for oil in every place we could, and the price went high again. It is what is known as a feast and famine industry.

Oil had been high, oil had been low, but it depended on how much was found, and so on. But during all of that period the oil industry met the demands of the Nation. It met every demand put upon it.

It met it at considerable expense, because this thing of building steel storage to store oil in is an expensive game. The storage itself costs from 40 to 50 cents a barrel, and you pay taxes and you have evaporation, and so on. The cost of carrying stored oil is very high, and therefore it is a wasteful thing from a national standpoint to have to store oil.

But despite all of that, the industry throughout this period produced enough oil to serve the Nation at an average cost, an average price for the oil of just about \$1.20 a barrel during that entire period. So we filled the demand. We did it through these various—I don't need to enlarge on them; I think you have the picture.

QUESTION OF GOVERNMENT INTERVENTION AND REGULATION OF
CONSERVATION

Mr. FARISH. In 1924—December 1924—a new influence came into the oil industry. A new picture was painted. The President of the United States at that time, Mr. Coolidge, appointed a Federal Oil Conservation Board, and in appointing that Board he made certain statements and certain charges about the oil industry. I would like to provide a copy of that letter and put it in the record right here, because that is the beginning of a new regime or a new condition in the oil industry. I presume you gentlemen are familiar with the letter, and I won't stop to read it, but I would like to quote just one or two words from it. This is in December 1924 [reading from "Exhibit No. 1325"]:

It is evident that the present method of capturing our oil deposits is wasteful to a large degree, in that it becomes impossible to conserve oil in the ground under our present leasing and royalty practices, if a neighboring owner or lessee desires to gain possession of his deposits.

Then he goes on to point out the need of conserving oil and the need of having reserves in the ground.

One other quotation [reading further from "Exhibit No. 1325"]:

I would express the desire that these conferences—

he is talking about conferences for this Board to hold with the public and with the industry—

may be open and exhaustive. The oil industry itself might be permitted to determine its own future. That future might be left to the simple working of the law of supply and demand but for the patent fact that the oil industry's welfare is so intimately linked with the industrial prosperity and safety of the whole people that government and business can well join forces to work out this problem of practical conservation.

I would like to introduce the entire letter in the record.

The CHAIRMAN. It may be received.

(The letter referred to was marked "Exhibit No. 1325" and is included in the appendix on p. 9952.)

Mr. FARISH. Following the publication of that letter and the inauguration of the Federal Oil Conservation Board, the oil industry felt that they had been playing hookey, so to speak, to put it in the language of the schoolboy; they had been playing fast and loose with a great national resource, and they had been trying to live and operate under the laws of the governments of the States that were wholly inadequate, inadequate even in determining just and fair property rights between individuals.

The first reaction the oil industry had to that letter was the appointment of a committee by the American Petroleum Institute to study and take account of the situation, to examine ourselves, to take stock of just what the industry was, where it was heading, and what were the influences and conditions that were operating in our industry. That was the first official act. There were probably innumerable arguments and debates of great resentment in the industry that the President of the United States would write such a letter as that. They thought, in their ignorance, if you will, they were doing a pretty good job of serving the public, and so on. But here was a new standard set for them, and at first blush the oil industry generally, and certainly I was one of them, I was in the heat of the debate, I resented

it just as much as anybody else, and in the first blush of the situation I thought it was unfair and unjust.

But this committee was appointed to make a study. You have heard some of the figures quoted before this committee. Unfortunately, I drew the assignment as chairman of the production group in that committee and I had to give up some great deal of my time to learn something about the oil business that I didn't know, in order to try to write this report, to try to help write this report.

The result of it, to make it brief, was that we were able to secure the help and aid of some six or seven hundred individuals within the Government and without the Government, in the various oil companies, to make a study of all the factors involved, the amount of oil we had, the amount of oil we were finding, wasteful methods that had been used in producing it that we had been charged with, the way it was being refined, the prospective need and so on.

We made a report known as the Committee of Eleven Report. There was still so much difference of opinion within the industry that we couldn't secure approval of the American Petroleum Institute board of the report. We published the report anyway as the report of the Committee of Eleven. The report is on record and the report showed in brief that what Mr. Coolidge said was true, that we had no established reserve, we were producing all the oil we had as fast as we could produce it, which was a literal fact. We did agree that we had perhaps a little over 5,000,000,000 barrels of proved oil in the ground, but that 5,000,000,000 barrels in the ground would take a long time to produce. We had no reserves.

So that was the beginning, if you will, of this era of conservation.

The CHAIRMAN. I understand when it was first suggested it was not altogether acceptable to the industry.

Mr. FARISH. No.

Senator KING. He stated there was resentment.

Mr. FARISH. There was quite a little resentment. We thought we knew a little more than we did.

The CHAIRMAN. That was one instance in which the industry resented in the first blush the interference of Government as expressed by the President of the United States, but later found out that that Government interference wasn't so bad after all.

Mr. FARISH. All right.

The CHAIRMAN. And that circumstance might be repeated, might it not?

Mr. FARISH. Will you please permit me to go on?

The CHAIRMAN. Now, Mr. Farish, I have observed that every time a member of this committee undertakes to ask you a question which illuminates the matter that is under discussion, you ask to be permitted to avoid answering the question in order that you may proceed with the outline in your own form. Now, I don't believe that that is altogether informative or helpful.

Mr. FARISH. I beg your pardon. If I have given that impression, Senator, I am quite sorry. I don't mean to give that impression for one minute.

Senator KING. I don't have that impression.

Mr. FARISH. I was launched out on trying to paint for this committee the story of conservation. I am perfectly willing to abandon that.

The CHAIRMAN. Not at all, we want you to develop it, but whenever a member of the committee asks you a question in the interests of clarity, I don't think it ought to be regarded as something that should not be done. Now, I don't want to interrupt your train of thought, but I don't think you ought to resent the questions that we ask.

Mr. FARISH. Please ask your questions.

The CHAIRMAN. I asked the question.

Mr. FARISH. May I have it, please?

(The reporter read the following questions and answers:)

The CHAIRMAN. That was one instance in which the industry resented in the first blush the interference of Government as expressed by the President of the United States, but later found out that that Government interference wasn't so bad after all.

Mr. FARISH. All right.

The CHAIRMAN. And that circumstance might be repeated, might it not?

Mr. FARISH. In the circumstance that the President of the United States might make a constructive suggestion relative to a similar situation, obviously it would be welcome.

The CHAIRMAN. Very well, now will you proceed?

Mr. FARISH. I have got to collect my thoughts now and get back where I was, if you will excuse me.

I think at this point that the industry had made its report in the form of the Committee of Eleven Report and we determined that there was about 5½ billion barrels of crude reserves in the country that could not be produced rapidly because we were producing it as fast as we could. So the idea, or the birth of the conservation idea, was caused by the President's letter, by the appointment of his Conservation Board. That forced the industry, through the first effort I have tried to describe, to take stock of itself, to learn what this thing was of reserves in the ground, to learn what conservation of production was.

At that time the industry was woefully ignorant of all of the scientific facts of conservation. I doubt whether there was a man—I know there was not a man in the petroleum industry that had a clear picture of the proper way to produce an oil field or the proper way under which conservation could be maintained in the production of our oil, so the education within the industry and without the industry began, and it has been a gradual evolution from that day to this. As I have stated, there were several of our States that had some conservation statutes. They were dead-letter statutes. I think that is the general term used for laws that nobody pays any attention to on the statute books, that have no force, there is no meaning to them. So that the industry had no official guide, if you will, it had no legislative guide, they had no legal guide as to how correlative rights, property rights, could be maintained between different producers in an oil field. All of this was a development of the time, and we began to uncover or discover through more efficient geological aids, technically known as seismographs, and so on, new prospects, new oil discoveries were rather frequent, and we began to pile up potential production.

Then the States got busy and, the State of Oklahoma and the State of Texas taking the lead, began to interpret and to write new laws on

this question of conservation of oil fields. So we saw the first proration orders dealing with the attempt to prorate production in an oil field that I think took place in Texas in 1928.

Since that date, however, due to this evolution of knowledge, evolution of legal practices, evolution of conservation practices on the part of the State authorities, this whole development of conservation and proration has taken place. Today we have State authorities prorating oil in most of the States of the Union, with probably two outstanding exceptions, Illinois and California. In California they have got a law that has been passed by the legislature but it will probably be decided on their recall system and put to vote again.

In Illinois the Governor is talking about presenting a bill to the special session of the legislature this fall, so it is entirely possible that within a short time we will see the States of the Union, all of them, controlling the production of oil within those States under the theory of conservation, to prevent waste and probably regulating production to market demand.

The CHAIRMAN. Are the conditions in Illinois at the present time wasteful?

Mr. FARISH. Yes, sir; definitely so.

I have tried to give you that brief résumé because I think you have to understand the background of this whole question in order to understand the local conditions that exist in States from time to time.

The CHAIRMAN. What part do you believe the Federal Government should play, if any, in this problem of conservation?

Mr. FARISH. I attempted to get in a position to answer that question, Senator, knowing it was coming, and I have debated a good many different things that the Federal Government might do or could do. I haven't been able to satisfy myself on many things or perhaps anything that it should do, but there is one thing that the Federal Government can do to help this whole effort of conservation.

In the first place, I believe that the concept of conservation through the State regulatory body is the proper concept. I believe regulation of production is a State matter, under the police powers of the State.

The CHAIRMAN. Can it be done effectively in that manner?

Mr. FARISH. Yes.

The CHAIRMAN. What is your opinion of the Connally Act?

Mr. FARISH. I believe in the Connally Act because the Connally Act is nothing more than offering to the States Federal police outside of State borders, to state it bluntly.

The CHAIRMAN. Without the Connally Act would the proration laws be effective?

Mr. FARISH. I think they would, but not as effective as they are with it. It just makes it a little harder to catch a fellow near the border. That is all. The Connally Act enables the State to have somebody on the other side of the border.

The CHAIRMAN. That is the desirable exercise of Federal authority from your point of view?

Mr. FARISH. I do. That is a direct aid to the States, to help their own law enforcement.

Mr. O'CONNELL. Mr. Farish, a moment ago you said that you thought the State control of this conservation problem was the proper

way to handle it under their police power. Is that in effect a legal opinion that the Federal Government lacks the power to do it under our form of government, or were you thinking—

Mr. FARISH (interposing). Well, I am not attempting to give you a legal opinion, Mr. O'Connell, but I think you will find a great many lawyers will say that that is correct.

Mr. O'CONNELL. Well, the desirability of the practice of having State enforcement up with the police power of the State, and I was wondering whether in your mind it was proper because of the legal limitation on the part of the Federal Government, or whether it was a more efficient way of handling it, disregarding the legal problem?

Mr. FARISH. I think it is the proper way to handle it and I have been told it is the legal way to handle it.

Mr. O'CONNELL. By proper, what do you mean? Can you elaborate on that?

Mr. FARISH. I believe in local government; I believe that the States ought to settle these questions for themselves.

Mr. O'CONNELL. You mean it can be more adequately handled by States?

Mr. FARISH. I think so. I think it is a matter for State regulation.

Mr. O'CONNELL. A matter of State's rights practically?

Mr. FARISH. Yes; to put it that way.

The CHAIRMAN. Well, Mr. Farish, do you think that any weight should be given to the fact that a large integrated company like your own operates in a great many States and that this company is therefore in its total field of operation beyond the jurisdiction of the States in which it operates, and that no single State within the boundaries of which such a company operates can effectively pass any law to conserve the public interest in the Nation as a whole? Is that a circumstance to which any weight should be given?

Mr. FARISH. No; I don't think so, sir.

The VICE CHAIRMAN. If you need any help, I would like to help you.

Mr. FARISH. I don't think I need any; I can answer "No" to that question.

The CHAIRMAN. Well, proceed then.

Mr. FARISH. I have answered it. It is no circumstance. I think the situation you describe is not a real situation.

The CHAIRMAN. Well, do you not operate beyond the boundaries of single States?

Mr. FARISH. Oh, certainly; in each State we have to operate under the laws of that State.

The CHAIRMAN. But are there not factors in the industry which cannot be regulated in the public interest by the separate and individual States?

Mr. FARISH. Our industry?

The CHAIRMAN. Yes.

Mr. FARISH. I don't know of any.

The CHAIRMAN. You don't know of any single factor whatsoever in the four branches of the industry which are under your direct control?

Mr. FARISH. I think this, Senator. I think we have to operate under the laws of each State in which we are doing business and we

have to live within the laws of each State, whatever the business that we are carrying on in that State.

The CHAIRMAN. Now, you tell us the story of a principle of conservation, a very highly desirable principle, which has been brought into effect in the United States because the President of the United States, who is certainly not a State functionary, took the initiative. Do you want the committee to understand that in your opinion that is the only aspect of the petroleum industry in which the United States should take a step?

Mr. FARISH. No; I don't think I said that.

The CHAIRMAN. You didn't say it. I am just trying to develop the effect of your testimony.

Mr. FARISH. You asked me what the Federal Government could do now to help in this general question.

The CHAIRMAN. And you think the capacity of the Federal Government to help ended with the initiation of conservation by the President, and with the passage of the Connally Act?

Mr. FARISH. No; I was going to try to answer it, but I haven't had a chance yet.

The CHAIRMAN. Well, proceed; you have your opportunity.

Mr. FARISH. I made the brief statement that I had given considerable thought to the question of what the Federal Government might do in this situation on conservation, and what they could do to help, and there are a good many things that have been suggested and discussed, but the only thing that I can put my faith in is, as being a real contribution—I might suggest in this way, if you will permit me. I took the trouble to get this down so that I might read it:

(a) It would be highly desirable for the Bureau of Mines to extend its work along the lines of helping to establish standards of efficiency in production. Studies and reports of procedures and methods of setting up better standards should be made available to the States. Critical studies might even be made of the proration procedures in the various States in the light of the standards considered desirable by the Bureau of Mines. The intent of these studies should be to help the States to overturn the rule of capture.

The Bureau of Mines might also make studies of facts bearing on the problem of doing equity among different owners in the same field and among different fields.

All this material should be made available to the State proration authorities. If necessary, the Bureau of Mines should have additional appropriations to cover the cost of making these studies.

(b) The Robinson-Patman Act needs to be classified in several respects:

1. It is now so drawn that it is very difficult for a company to know when it is violating the law.

2. It should be made clear that a difference in the functions performed by a particular type of distributor is a proper basis for price differentiation.

(c) Because costs, especially marketing costs, for particular commodities are so difficult to determine, the language of the act with respect to cost as a defense of price discrimination should be liberalized.

Those two suggestions I make, sir.

The CHAIRMAN. What do you regard as price discrimination?

Mr. FARISH. Pardon?

The CHAIRMAN. What do you regard as price discrimination?

Mr. FARISH. Well, I have been unable to determine, Senator, being no lawyer, but asking advice now and then, just where the law does make the distinction.

The CHAIRMAN. I am not asking for your interpretation of the law. Let us acknowledge for the purpose of the question that the Robinson-Patman Act may be vague and may be difficult to interpret.

Mr. FARISH. Yes.

The CHAIRMAN. I am asking you what in your opinion would be a proper definition of price discrimination. Where should the prohibition lie and where should the companies be released from any legal prohibition?

Mr. FARISH. Well, I am sorry I am not prepared to go into that now. This question of defining what should go into a law is a little more intricate than I feel I can make a contribution on.

The CHAIRMAN. Well, if you can tell the committee that the Robinson-Patman Act needs clarification, can you not tell the committee in what respects it needs clarification?

Mr. FARISH. I will be glad to file a brief with the committee on that, if you like. I have to get my lawyers to prepare it.

The CHAIRMAN. Well, but your lawyers will only put into legal language the policy which the company desires to enforce, so I am trying to determine the policy. I don't think it requires any legal advice to outline that.

Mr. FARISH. Well, Senator, I don't think I can help you much on that. I don't want to dodge it, if you want me to be in the attitude of trying to give you direct illustrations, but the Robinson-Patman Act in our shop is one of these things that when we ask, "Is this legal, are we violating the law?" one of the lawyers will say "No, it is all right," and another one says, "Well, I don't agree with you."

The CHAIRMAN. Can you give me an example of such a question now? That would immediately bring before this committee the type of situation which is uncertain. What is it that you have wanted to do with respect to prices on which there has been a dispute in your company?

Mr. FARISH. I don't know that I can give you just what you want, but the best answer—

The CHAIRMAN (interposing). I only want the facts.

Mr. FARISH. The best answer I can give to you, maybe if you let me refer to counsel I can give you two or three examples. I want to answer your question the best I can and not just guess at it or stab at it.

The CHAIRMAN. It occurred to me that since you were testifying here about the vagueness of the Robinson-Patman Act you probably had in mind two or three illustrations in which this appealed to you.

Mr. FARISH. To be perfectly frank I have them in mind only in a general way.

The CHAIRMAN. Well, would you be good enough, then, to file with the committee a statement—it doesn't need to be a lengthy brief—giving some illustrations of circumstances in which you have found in your own experience the Robinson-Patman Act to be vague?

Mr. FARISH. I will be delighted to do it, sir.¹

The CHAIRMAN. Let's see what these debates have been within your legal organization as to the effectiveness of the act.

¹ Mr. Farish submitted his opinions in a letter dated May 6, 1940, appearing in the appendix on p. 9957.

Mr. FARISH. I will be glad to do that.

Mr. Cox. With respect to the Connally Act, would you be in favor of writing into the statute when it is next reenacted certain standards to make sure the Federal police power is not used to assist in an effort to fix prices, rather than to assist in an effort to accomplish a true conservation purpose?

Mr. FARISH. Would I be in favor of it?

Mr. Cox. Yes.

Mr. FARISH. Well, I have no objection to it, if you put it that way.

Mr. Cox. Well, you have testified here that you are opposed to the use of conservation measures to fix prices, have you not?

Mr. FARISH. Yes, sir; I have been on record to that for some time.

Mr. Cox. In the light of that opinion, don't you think it might be a good thing if the Federal Government or if the Congress took steps to make sure that the power which it was conferring upon executive officers was not used—

Mr. FARISH (interposing). I see no particular objection to that, Mr. Cox, if it will serve any useful purpose.

Senator KING. Mr. Cox, may I inquire, would not an agreement or combination to fix prices in interstate commerce be a violation of the Sherman law? In other words, do not the Federal statutes now penalize persons who do combine or conspire for the purpose of monopolistic activities?

Mr. Cox. Senator, if that combination is effected and the purpose carried out by means of State regulatory statutes you raise a very difficult question which I should not like to attempt to answer off-hand because there we would have the question of whether or not we could prosecute a State government.

Senator KING. I want to interpret correctly your view. As I understand your view it is that if the States adopt policies with respect to their internal affairs, for instance the oil business, and those statutes permitted agreements to fix prices, you think that there would be some question as to whether or not the Federal Government might prosecute them?

Mr. Cox. No; that is the suggestion which you have raised, as I understand it. My suggestion is this, that if the States in the exercise of their sovereign power adopt a public policy which permits price-fixing agreements or permits arrangements which restrict demand and supply, I raise the question as to whether or not the Federal Government should lend its aid to such efforts by enacting a statute to direct Federal officers to prosecute people who violate those arrangements. I made no suggestion as to interference of the sovereign powers of the State. I simply suggest there may be conditions in which it may be inadvisable for the Federal Government to assist price-fixing arrangements, no matter under what sponsorship. Is that perfectly clear?

Senator KING. Well, I think so, and I am inclined to think the Federal Government ought not to connive at price fixing.

Mr. Cox. That is my point.

Since you have been speaking about statute regulations for statutory action, I have assumed from your testimony that you are a believer in competition.

Mr. FARISH. Yes, sir.

Mr. Cox. And I also assume by reason of that belief of yours that you are in favor of maintaining the existing antitrust statutes.

Mr. FARISH. Yes, sir.

Mr. Cox. And you would not look with any favor upon proposals to modify them or change them in any way so as to permit industry agreements or cartel arrangements of any kind; is that correct?

Mr. FARISH. I think that is correct today. May I explain? I think perhaps in the earlier days of this proration effort I did advocate some modification of the antitrust laws to permit producers to agree on a common program of operating an oil field. That may still be desirable, but as far as my own judgment goes, I am willing to pass it and I doubt whether it is of any importance today.

Senator KING. In the operation of an oil field, did you mean merely the determination of the policy of capture—

Mr. FARISH (interposing). That is all. I meant agreements that would permit the modification or wiping out of this law of capture, and of common effort in a single pool. As far as I can recall, that is the only advocacy of the modification of the trust law that I have ever stood for.

Senator KING. You didn't favor any policy in which you permit the fixing of prices?

Mr. FARISH. Oh, no, no; it was only the method of production.

Mr. Cox. You are not even pressing that proposal?

Mr. FARISH. Some people still think it is necessary. Personally, as I have said, I don't think so.

Mr. Cox. I assume also that you believe the antitrust laws should be vigorously enforced.

Mr. FARISH. Yes, sir.

Mr. Cox. Do you think anything might be done to strengthen those laws in any way, Mr. Farish?

Mr. FARISH. I wouldn't know.

Mr. Cox. You haven't any views on that?

Mr. FARISH. No. I have the general opinion that the law is adequate.

Mr. Cox. It has sometimes been proposed that changes be made in the law so as to increase the monetary penalty which is imposed for violation of the laws. Do you have any opinions on that matter?

Mr. FARISH. You mean the bill that has been proposed—the penalty bill for individuals?

Mr. Cox. That is one bill. I was thinking—

Mr. FARISH (interposing). I don't know the name of it.

Mr. Cox. There was a bill, but I was speaking generally of proposals to increase the fines which might be inflicted upon persons who violated the act. I wouldn't ask you to discuss the details of any particular bill, because I assume you are not familiar with them.

Mr. FARISH. I am certainly not familiar enough with them to discuss the details. I don't know, frankly, Mr. Cox, whether the present penalties are adequate or are inadequate. I just have the general feeling that prosecution, or grand jury hearing on an antitrust law is a pretty severe penalty itself.

Mr. Cox. Quite apart from any fine.

Mr. FARISH. Yes.

Mr. Cox. You feel perhaps we might just discard the fines and rely on the moral effect?

Mr. FARISH. Oh, no; I wouldn't go that far, surely. If the fines are not adequate, if you find they are not adequate and Congress thinks they are not adequate, I see no objection to raising them.

Mr. COX. The present fine is \$5,000 for each and every offense. Disregarding individuals for a moment, a \$5,000 fine to a large corporation is not a very serious matter, is it?

Mr. FARISH. Not in dollars and cents, but it is in prestige.

Mr. COX. You are speaking there again of the moral deterrent?

Mr. FARISH. After all, that is more controlling than a few dollars.

Senator KING. There may be many counts in an indictment, because each transaction might be an offense.

Mr. FARISH. Yes, sir.

Mr. COX. Even if it got up to 15 or 20 thousand dollars, aside from the moral feeling, which may be very important, the monetary penalty is not much of a deterrent?

Mr. FARISH. I think so.

The CHAIRMAN. Do I understand you to express the opinion that price has no part in the proration laws?

Mr. FARISH. Oh, no.

The CHAIRMAN. I mean in the desirability of proration laws.

Mr. FARISH. I didn't say that, Senator. I think the theory of our proration laws, the general effect of them, is to do just what they set out to do, to gradually improve the technique of production and to improve proration practices. I think we suffer materially by reason of the lack of development of standards of efficiency, measurements of efficiency, and that is the reason I make this recommendation.

The CHAIRMAN. Those recommendations with respect to the Bureau of Mines?

Mr. FARISH. About the Bureau of Mines being able to get an entirely disinterested group of scientists; if you give them enough money to do a good job, I think they will affect proration practices in all the States. It will help us all to get to a better standard.

The CHAIRMAN. That is purely a technical effect?

Mr. FARISH. Right.

Now I am going on to the price thing. I say unhesitatingly that price has influenced these proration authorities. There isn't any argument about that. The record is so clear that it would be stupid to say it hadn't and they have been influenced by price. It is quite natural.

The CHAIRMAN. That is perfectly clear, but what I am trying to find out is your opinion as to whether or not the proration laws should be administered solely from the point of view of conservation, the prevention of waste, the development of improved engineering technique, or whether the element of price should also be considered. Now, is that desirable?

Mr. FARISH. I would leave out the element of price.

The CHAIRMAN. You would leave that out altogether?

Mr. FARISH. I would, sir; and I try to give you that story.

The CHAIRMAN. I was very much interested in reading another sentence of President Coolidge's letter—

Mr. FARISH (interposing). But that is an ideal. Don't let us overlook that. This question of regulating production by State authorities, and those authorities being elected representatives of the people, they are not going to ignore price even though the law says they

shouldn't take it into consideration, and I don't think they should take it into consideration from a matter of strict conservation practices.

The CHAIRMAN. Now, let me read you a sentence from the letter of President Coolidge:

We are not today, however, facing an undersupply of oil. The production of our 300,000 wells is in excess of our immediate requirements. That overproduction in itself encourages cheapness which in turn leads to wastefulness and disregard of essential values.

Have you any comment to make upon that?

Mr. FARISH. That is a perfectly sound statement.

The CHAIRMAN. So that price does have an effect upon conservation, too.

Mr. FARISH. Oh, yes; we can't get away from that.

The CHAIRMAN. Then in your view the effect on price is merely incidental to the main purpose of preventing wasteful production?

Mr. FARISH. I think price is affected; I mean, proration does effect price, and it is inevitable that it is going to. Conservation affects price, and that is what Mr. Coolidge is saying in his statement there.

The CHAIRMAN. But it should not be, in your opinion, a primary consideration in the administration of the law.

Mr. FARISH. No, sir; it should be incidental only to doing a good conservation job.

The CHAIRMAN. And the suggestion that there should be a proration law in Illinois is based from the point of view of the industry, or at least from your point of view solely upon the consideration of preventing waste of that resource within the State of Illinois?

Mr. FARISH. Yes, sir; I think Illinois is producing its oil in a very wasteful manner.

The CHAIRMAN. It is now almost half past 12. Are there any other questions to be addressed to Mr. Farish?

Mr. Cox. Mr. Chairman, before the committee rises I have some documents I would like to offer for the record.

The CHAIRMAN. Let us determine what the procedure is to be. Mr. Farish, have you concluded your statement?

Mr. FARISH. No, sir.

The CHAIRMAN. You want to proceed?

Mr. FARISH. Yes, sir.

The CHAIRMAN. I didn't know how far you had gotten.

Mr. FARISH. It won't take me very long. It will probably take an hour that I would like to have.

The CHAIRMAN. As I indicated earlier in the morning, both Senator King and myself find it necessary to be on the floor of the Senate this afternoon, and we will therefore be unable to be here.

In all probability your testimony will be completed this afternoon, so I want to take this opportunity, since I will not be here at the afternoon session, to say how much the committee has appreciated the presentation which has been made on behalf of the American Petroleum Institute, and how much it has appreciated your own very diligent attendance upon the committee and its sessions, and very evident industry which has gone into the preparation of your statement. The chairman personally, and I know all the committee individually, feel very grateful for this presentation, and I may say that that expression of appreciation extends to all who have presented testimony to the committee. I feel that we have made a survey of the petroleum

industry such as probably has never been made before, and I want all who have participated to know how grateful the committee is.

Did you want to present something, Mr. Cox?

Mr. Cox. Yes. Yesterday afternoon I read or made a statement for the record with respect to the rate of return computed in a certain way for the Ajax Pipeline Co., and at that time said I was going to introduce a table which showed that rate of return for the period between 1931 and 1938. A table has now been prepared from figures obtained from the Interstate Commerce Commission showing the rate of return based on the income from carrier property in relation to gross investment in carrier property, without any deduction for depreciation but plus current assets, and I should like to offer that for the record.

The CHAIRMAN. The statement may be received.

(The tabulation referred to was marked "Exhibit No. 1326" and is included in the appendix on p. 9952.)

Mr. Cox. I should point out that although the rate based there includes current assets, we were not able to include in the income any of the income from current assets, so the table to that extent is inaccurate. It is an error which we don't complain of.

I should also like to offer at this time, in view of the discussion yesterday, a table showing the following facts with respect to the Humble Pipeline Co. for the period between 1923 and 1938. This table, likewise, is based on the published reports of the Interstate Commerce Commission. This shows the gross investment in carrier property (without deduction for depreciation); current assets; gross investment in carrier property (without deduction for depreciation) plus current assets, which is the total of the two preceding figures; income from carrier property; capital stock; and dividends declared.

The CHAIRMAN. The statement may be received.

(The tabulation referred to was marked "Exhibit No. 1327" and is included in the appendix on p. 9953.)

Mr. Cox. I think the statement should be accompanied by this footnote, which I submit also.

The CHAIRMAN. Without objection it is so ordered.

Then the committee will stand in recess.

Mr. FARISH. I haven't seen these statements, Mr. Chairman. I presume it will be entirely appropriate that if, after studying them, there are some interpretations made, we may also do so.

The CHAIRMAN. That will be perfectly acceptable. The committee will stand in recess until 2:15.

(Whereupon, at 12:30 o'clock, a recess was taken until 2:15 o'clock of the same day.)

AFTERNOON SESSION

(The hearing was resumed at 2:20 p. m., at the expiration of the recess, Representative Reece presiding.)

Acting Chairman REECE. The committee will come to order, please.

Mr. Snyder, are you ready to proceed?

Mr. SNYDER. Yes, Mr. Chairman.

On Monday morning, Mr. Cox referred to a decision of the court in Texas relative to the application of Mrs. Dailey for a drilling permit.¹ He reserved the right to submit a copy of the opinion for the

¹ See p. 9650, *supra*.

record. I now offer for the record a six-page opinion of Associate Justice Blair, of the Civil Court of Appeals of the State of Texas in the case of *Mrs. Nellie Pollard Dailey v. The Railroad Commission of Texas*. I recommend that the opinion be printed in the record.

Acting Chairman REECE. The committee has already agreed to accept the opinion for the record.

It will be accepted.

(The opinion referred to was marked "Exhibit No. 1328" and is included in the appendix on p. 9953.)

Mr. SNYDER. At the time Mr. Del Sesto testified he offered two statements which have been printed in the record, and four exhibits. The committee staff has reviewed these exhibits and decided to ask the committee to print part B of appendix II, which contains the analyses of consolidated assets and consolidated income classified by branches or departments. This appendix consists of photostatic copies of the answers of the various oil companies to the committee's questionnaire, and I recommend it go into the printed record.

Acting Chairman REECE. If there is no objection, it will be printed.

You may proceed now, Mr. Farish, if you please.

(All of the economic data submitted by Mr. Del Sesto, marked "Exhibits Nos. 1312 to 1317," inclusive, are printed separately as Hearings, Part 17-A.)

OPTIMUM PRODUCTION

Mr. FARISH. The next subject that I would like to take up is optimum production. Conservation is not to be confused with hoarding. Oil conservation is simply a scientific development for the prevention of waste. The engineering basis for the prevention of waste is well established and has been thoroughly tested in practice, as testified by Dr. Pogue, Mr. DeGolyer, and Colonel Thompson. The object is to get more oil out of the ground, to enable the producer to obtain more oil from a particular property in the long run than if he produced it in a wasteful manner. This means production at a rate that will yield the optimum quantity. Optimum production may be defined roughly as "the most oil at a reasonable cost," that is, the most oil that can be obtained without spending more on the addition to the supply than that addition is worth. The concept therefore embraces economic aspects as well as considerations of physical waste.

Acting Chairman REECE. Would you pardon an interruption. Mr. Farish? My attention has been called to the use of the word "optimum." Is that the common term to use in this connection?

Mr. FARISH. I really am trying to explain that term in this paragraph, Mr. Reece, but I don't know that I do, so I will try to answer your question. I think the words "optimum production," optimum rate of production, have come to be commonly used within scientific circles, we will say, of production, engineering circles at least, within the last couple of years, to try to name the time, as a simple description of what might be termed scientific, efficient production practices. That is all the words "optimum production" means, to my mind, as a simple definition of what could otherwise be termed the best engineering, the best scientific production practice.

Acting Chairman **REECE**. That answers my question, and I had an understanding of the application which was made of the word, and you have answered the other phase of my query as to whether it was the generally accepted word for this purpose in scientific circles.

Mr. FARISH. I think it is today, sir. The idea of optimum production involves several things: (1) The most economical recovery for a pool as a whole should be established at a rate that will maintain the bottom-hole pressures. (2) There should be proper well spacing to avoid unnecessary drilling costs. (3) Withdrawals of oil should be made ratably from each property owner's holdings, protecting correlative property rights and maintaining equilibrium within the reservoir. Under a condition of optimum production as thus defined, it will be possible to avoid almost entirely the injurious consequences of the rule of capture. This is the job of proration.

Naturally, the foregoing definition of optimum production is a statement of an objective. For a closer approach to a realization of this objective by means of the proration process, several things are required: (1) More extensive application of the best engineering practice, thus bringing about acceptance of standards of efficiency in production; (2) further development and acceptance on the part of the regulatory bodies and the industry as well of standards of equity not only within a field, but also between fields, and (3) a great deal of patience with slow evolution in a situation where varied and complex social interests are involved.

It must be remembered that for roughly 50 years the history of the oil industry was one of unbridled competition in the exploitation of a natural resource. The story was repeated over and over again as each field came in. I told that story partly this morning. There is no necessity of repeating it again. The large rewards to some of the exploiters of oil fields, the speculation for high stakes, the injurious effects of competition operating under the rule of capture—all this is a heritage which has conditioned the thinking of oil men for many years; whereas, conservation, which is in sharp contrast to all this previous history of the oil industry, is only about 10 years old. It is also true that acceptance of the new point of view has by no means been simultaneous. Some companies and individuals have pioneered; others have lagged. It is for these reasons that patience is needed. Patience and education also, I would say.

THE FUTURE SUPPLY OF OIL

Mr. FARISH. I next go to The Future Supply of Oil.

Whenever the topics of conservation and proration are discussed, the question is raised as to the probable extent of the Nation's future supply of oil. Our proved petroleum reserves are estimated at something between 17 and 22 billion barrels, about 14 to 17 years' supply at the present annual rate of production. This concept of proved reserves is a technical one. It means reserves which have been tested by sufficient drilling to make possible a reliable quantitative estimate of the recoverable oil which they hold.

The figure of approximately 17 to 22 billion barrels represents a substantial increase over the estimates of earlier years, an increase attributable partly to technological developments such as deep drilling, partly to improvement in methods of finding oil, and partly to

increased acceptance of the greater total output and more efficient recovery from oil fields brought about by delayed production, i. e., proration. The present figures can be regarded as a more reliable one than the estimates of earlier years. Proved reserves, however, do not include all the oil that exists; many new discoveries of oil doubtless will be made through the drilling of unproved acreage and the discovery of new pools. No one can tell exactly what the future discoveries will be, but while there is ample justification for prudence there is no occasion for alarm. Many advances in the art of finding oil have taken place in the last 15 years, and as these advances have been made they have been put into use. Of course, each new pool discovered reduces by that much the potential discoveries of the future. How rapidly new discoveries are made in relation to the rate at which existing reserves are exhausted will determine how large the Nation's reserves will be in the future. Although there are apparently no notable new developments in oil discovery procedures now on the horizon, it is not to be doubted that there will be continued technological advances along these lines and that these advances will play a part in future oil discoveries, how large a part no one can now say.

On the basis of optimum production, how much oil could be currently brought to the top of the ground? It is a personal judgment among most of us in the Standard Oil Co. (N. J.) that if withdrawals of crude oil from underground reserves were to take place under conditions which would reduce waste to the practicable minimum, the rate of production might fall short of meeting the current market demand by possibly 200,000 to 300,000 barrels daily. This judgment is based on the best information available, both on the size of reserves and on the most economical methods of production. It is also based on the company's experience in seeking to apply an optimum rate of production, wherever possible, to its own holdings. The executives of the Standard Oil Co. (N. J.) have some confidence in this estimate; we know that it is an opinion, but we think that the weight of engineering experience supports this opinion.

That in effect says if we applied the maximum efficient rate of production to each and every oil field in the United States, it is our belief today we couldn't produce or would not produce 3,400,000 barrels daily.

RELATION OF OPTIMUM PRODUCTION TO PRICE

Mr. FARISH. Suppose the assumption is made that the optimum rate will be less than the current rate; what is going to be the effect on the consumer's pocketbook? It is fairly clear that changes on the supply side rather than changes on the demand side have been the most conspicuous causes of major fluctuations in the prices of crude oil—at least during most of the twenties and thirties. The variations in the demand for petroleum products which accompany changes in business conditions from prosperity to depression, and vice versa, are not, in the aggregate, so large as they are for many other industries; and their effect on the prices of petroleum products is in general less severe than is the case for many other industries. Therefore, it seems reasonable that when the fluctuations in crude-oil production are restricted by the widespread application of the optimum output principle, the changes in demand arising from the ups and downs of

business conditions will not be likely to cause extraordinary price variations. That is, over a long period, control of output on the optimum production basis will reduce the range of fluctuations in crude-oil prices in comparison with the period before proration.

It is not to be thought, however, that the price of crude under conditions of optimum production is likely to follow any steady or easily predictable course. On the assumption that optimum production initially would be below current demand, an approach through the proration procedures to such an optimum rate of output presumably might, if it happened rapidly, occasion a price advance. Then the normal sequence of events would be stimulation to oil-finding activities, increase in the optimum production, and some decline in price. If these developments took place slowly, which is much more probable, they would go hand in hand with relatively little effect on price. Of course, the chance element in the discovery of oil, the effect of changing business conditions at different times, and the uneven progress of various States and various oil fields towards the ideal of optimum production, all might combine at times to make price movements irregular and erratic.

One factor of some importance which would affect the eventual price to consumers under the ideal sort of proration would be the lower cost of getting oil out of the ground by proper well spacing and rational field development. With optimum production, the drilling investment for each barrel of oil would be substantially lower. This reduction in cost would help to stimulate oil-finding activities and help to establish a balance between optimum output and market demand.

There should also be mentioned the probability that a restricted output of crude oil would place a further premium on advances in the technology of refining and would thus insure continued improvement in the quality of products, at the same time stimulating additional investment for modernization purposes. Even if there was a tendency for prices to consumers to advance somewhat, a reasonably steady price based on optimum production might prove cheaper for consumers in the long run than a situation in which low prices during a period of wasteful production were followed by extremely high prices when the scarcity began to pinch. As a matter of fact, it is quite probable that proration has already made the price of gasoline lower than it otherwise would have been, through increasing the yield of crude from the existing oil fields.

I was going to suggest if there are any questions there, perhaps we ought to take them up because I go on to somewhat of a prophecy.

Acting Chairman REECE. Are there any questions?

Mr. O'CONNELL. Do you think the statement in that last sentence of yours could be demonstrated with any degree of certainty as to the effect of proration on the price of gasoline so far?

Mr. FARISH. Well, I think it could; yes. In other words; I don't think anyone thoroughly informed and having the feel of the situation would argue to the contrary.

Mr. O'CONNELL. Then the sentence just before it, where you say:

Even if there was a tendency for prices to consumers to advance somewhat, a reasonable steady price based on optimum production might prove cheaper for consumers in the long run.

That is a pretty long run view, isn't it? I mean looking at the situation as it exists today, you were looking forward to the day when because of wasteful methods of production, the shoe begins to pinch 10 or 12 years or some longer period from now.

Mr. FARISH. It is a longer view, but we have a certain amount of experience, of historic background to support that view.

Mr. O'CONNELL. In one sense it is a longer run view today than it was 10 or 15 years ago because the shoe is not nearly so close to pinching in terms of proven reserves.

Mr. FARISH. Perfectly correct; yes, sir.

Mr. O'CONNELL. In an even longer run point of view, we could say that the shoe would pinch sometime whether you have conservation or not, that is assuming a natural resource such as oil is.

Mr. FARISH. That is correct; yes.

Mr. O'CONNELL. So we do have the prospect the shoe will begin to pinch some day, whether in 10 years or 50 years.

Mr. FARISH. Undoubtedly we have the prospect, looking at it frankly, that some day the abundant supply of raw crude oil available at a reasonable price will fail in this country. When that time comes, when the shoe begins to pinch in a sense, the cost of gasoline will step up to substitute cost levels rather than to crude cost levels.

Mr. O'CONNELL. There are a lot of imponderables in the situation which might lead one to wonder how much, as a practical matter, attention we should pay to the long run point of view. We now are in better shape, I take it, in terms of proven reserves than we were 5, 10, or 15 years ago, and looking ahead 10 or 20 years we may not even be using crude oil, regardless of the supply.

Mr. FARISH. Yes; that is a possibility, but I don't think a probability.

Mr. O'CONNELL. No; but there are a lot of imponderables, too. Other than that, we are discovering oil as rapidly as we are using it, practically, now.

Mr. FARISH. All that oil proration and conservation means, in my judgment, is production of a so-called limited natural resources without waste, and to enable the public to have the product at as low a cost as the service can be rendered.

Mr. O'CONNELL. This morning in discussing the proration laws in operation, you suggested that it would be unreasonable to take the view that the State regulatory bodies in operating the conservation laws have not been influenced at times by the price factor. I think that was the general purport of what you said.

Mr. FARISH. That is right.

Mr. O'CONNELL. And you also indicated that it would be unnatural to expect that they would not be so influenced, being elective officials and being responsive to the will of the people they represent.

Mr. FARISH. That is correct.

Mr. O'CONNELL. That brings me to this possibility, that the elective officials to whom we are referring are elective officials in oil-producing States, and would it not follow from that that they would be more apt to be influenced by the price factor in terms of getting a good price for crude than influenced by the broader question of what is to the best interest of all the people who consume petroleum products.

Mr. FARISH. Well, I think that is obvious.

Mr. O'CONNELL. Would it not, then, suggest that theoretically at least it would be entirely possible to minimize this practical difficulty that you have adverted to by some other type of regulatory control, other than by having it solely in the hands of the officials and States who have this obvious interest in production?

Mr. FARISH. That is a question, Mr. O'Connell, I think that has been debated off and on within the industry and within Government circles for a good many years, and I think—I don't like to quote Government opinion because I am not sure I can quote it accurately—but at least I am under the impression that the authorities here in Washington felt that they were sufficiently protected in any undue price influence that the States might get because they are primarily interested—the producing States might get, because they are primarily interested in production because they can cancel if they like the Connally Act; they can lower the bars on imports and tariffs; and they can make America or the United States a free market for the world oil; and my impression is that those who have assumed any responsibility for advocating a fair price for oil have felt that they had ample power to protect the public from any abusive price. I think that is a fair statement.

Mr. O'CONNELL. I wasn't attempting to venture any opinion myself, but it seemed to me worth considering that the primary job of controlling the operation of the proration laws is one that is in the hands of the officials in oil-producing States; the measure of control that the Federal Government can exercise is a very indirect one, as I understand it. They could repeal the Connally Act, of course. I take it there is a provision in the compact approved by the Congress to the effect that the States will not use the compact so as to control price?

Mr. FARISH. Certainly.

Mr. O'CONNELL. That in practical operation, so far, at least, there has been nothing more than an admonition, as I understand it, because they have used it.

Mr. FARISH. That is probably all that would ever be needed.

Mr. O'CONNELL. All that would ever be needed?

Mr. FARISH. I say that is probably all that would ever be needed, would be an admonition.

Mr. O'CONNELL. But it didn't work in this case. I mean there is an admonition contained in the State compact, approved by the Congress, but I also understood that the State officials have in fact at times used proration laws for the purpose of influencing the price contrary to the admonition in the compact. That would suggest that maybe something more was needed.

Mr. FARISH. Well, I don't know—I don't agree with you. I don't think it is. By admonition I meant that any time that the administrator of the Connally Act, the Secretary of the Interior, and the President of the United States would tell these Oil State Compact fellows that they were "rigging" the price of crude, take an extreme case, and that the price was unfair, or the price was unreasonable, and that they were going to lower the bars on imports, and so on. I think all they would have to do was to issue an admonition. That is what I meant by "admonition."

Mr. O'CONNELL. My point was a little bit different than that, and I think we are not talking on the same plane when we are talking

about having Federal Government or officials determine what was a fair or reasonable price for crude. My understanding of the provision in the compact was that the State officials who are represented in the organization were not to use that organization for the effect of influencing or controlling price, and the question of the reasonableness of the price.

Mr. FARISH. I think that is correct. That is part of their charter, that is in their charter.

Mr. O'CONNELL. What?

Mr. FARISH. The Oil State Compact group.

Mr. O'CONNELL. The provision to which I have referred?

Mr. FARISH. Yes, sir.

Mr. O'CONNELL. Well, being specific, the action of the oil-producing States in August in shutting down oil production for 2 weeks, was, as I understand it, a very definite price angle to it and how could the Federal Government have prevented that action under existing law?

Mr. FARISH. I don't know that the Federal Government could. That was not, if I understand it correctly, an action of the Oil State Compact, an action of individual States to follow the lead that Texas and Oklahoma, under the leadership of the Governor of Oklahoma, took in the matter.

Mr. O'CONNELL. Well, I am not entirely clear on that. I was under the impression that a meeting of the oil-producing States was called by Colonel Thompson at that time in connection with that shut-down.

Mr. FARISH. It was.

Mr. O'CONNELL. I think I thought that was under the compact.

Mr. FARISH. I only point out, if I understand the record correctly, also, that they disclaim it was a direct action of the Oil State Compact group.

Mr. O'CONNELL. Yes; I understand that they did that; but as a practical matter I know of no effective way in which the Federal Government, under existing law, could do very much about whatever action the States may take under conservation laws.

Mr. FARISH. Well, I would have to agree with that; yes. They have only the remedy which I have suggested.

Mr. O'CONNELL. As I would understand it, effective use of conservation technic would presuppose a certain amount of scientific knowledge which would enable the regulatory body to determine the extent of the pool, the amount of the resource available under each particular tract, in general?

Mr. FARISH. It requires a considerable amount of technical knowledge; yes, sir.

Mr. O'CONNELL. This is a little bit off the discussion that we have been having, but are you familiar with the provision in the Internal Revenue Law relative to the treatment of depletion of oil wells?

Mr. FARISH. In general I am familiar with it; yes.

Mr. O'CONNELL. In general the provision, as I understand it, is an arbitrary one which exempts from tax 27.5 percent of the gross or 50 percent of the net revenue derived from production facilities, on the grounds that that is reasonable to exclude from income as depletion. That suggested to me that with the advance in technics which makes it much more possible than it has been heretofore to determine the

nature and extent and value of the oil under particular tracts of land, it might be reasonable to anticipate a change in that method, that arbitrary method of computing depletion, which as I understand it now has nothing to do with the cost of the facilities being depleted or the value of them. Have you any thoughts on that? I don't want to press you if you haven't thought of it.

Mr. FARISH. I don't know that I am capable of discussing that technically. I only know the principle under which it is in the law, and that is a reward to the finder, the searcher of oil, to put him in some particular class with regard to depleting his property.

Mr. O'CONNELL. That may be part of the theory behind the law.

Mr. FARISH. I think that is the principle back of it. It is intended as a reward to the chance-taker in discovering oil.

Mr. O'CONNELL. I hadn't realized that played such a large part in the principle. I thought it was a method of reimbursing the cost of discovery of a wasting asset.

Mr. FARISH. Put it this way, Mr. O'Connell: A great many people argued, and still argue, that the oil business is like the gold business, that there are more dollars put into the ground than there are taken out, and if I understand the theory of depletion correctly, depletion has been an allowance that the Government has been willing to grant free of liability for a tax to encourage the prospecting and development and the chancetaking in discoveries of oil.

Mr. O'CONNELL. I wasn't attempting to raise any issue as to the propriety of the methods of treating depletion heretofore, but it occurred to me that the reason it had been treated that way was to a large extent because of the lack of scientific information, and so forth, that we now have available.

Mr. FARISH. I am sorry, but I am not close enough to the technique of that to discuss it.

Mr. O'CONNELL. I know; I shouldn't have asked the question.

Representative WILLIAMS. I understood from your discussion this morning that practically all of the oil States have some kind of conservation laws.

Mr. FARISH. Yes, sir; all but two of the major producing States.

Representative WILLIAMS. Is there any uniformity among those laws?

Mr. FARISH. They are quite similar. I couldn't tell you just where they differ, Mr. Williams, but they are all on the same general principle. Some of them go further than others; some of them are more definite; some of them cover subjects that are not covered by other laws; but, in the main, they are all quite similar.

Representative WILLIAMS. They all try to put into operation what are considered scientific engineering methods to get the optimum output?

Mr. FARISH. I am sorry to say they all don't; no.

Representative WILLIAMS. They don't do that?

Mr. FARISH. They set up a definition of waste under the statute in each State, and they leave primarily to the regulatory authorities the determination of what constitutes waste as is described in the statute, and as I stated this morning, I think one of the weaknesses, and I presume that is what you are directing your question to, in

this conservation by State regulatory bodies and proration authorities today is the lack of development of adequate standards of efficiency, and that is one reason I make the recommendation that I do that you gentlemen help the Bureau of Mines with sufficient funds so they can make a real contribution toward developing these standards.

Representative WILLIAMS. That was what I had in mind, and the thought also occurred to us, what would be the situation if they didn't happen to agree with that standard set up by the Bureau of Mines?

Mr. FARISH. Well, they might disagree with it and they might act contrary, but my experience is, truth will prevail, and that sooner or later they are going to have to accept scientific standards.

Representative WILLIAMS. And then there is another phase of it in my mind, and that is, what are we going to do, or what is to be done, with the States who won't enact, who don't enact and will not enact, any kind of conservation laws at all?

Mr. FARISH. Well, if I may express an opinion—also a hope—I don't think there will be any States like that.

Representative WILLIAMS. I am leading to this point, looking at it from a national standpoint.

Mr. FARISH. I understand, sir.

Representative WILLIAMS. Whether we will not come to the position where it will be necessary for the government not only to establish the standards that are necessary to preserve this great natural resource, but also be in a position to enforce them.

Mr. FARISH. I have to admit, frankly, that that may become a possibility. That may become a necessity some day. I don't think we have reached that stage today. I don't think it is here. I don't think that necessity exists. I think we all know, I might say, so little about the real scientific production of oil and the acceptance of strict engineering practices is such that we haven't given it a fair trial. I will put it this way: and these State authorities haven't felt the necessity for adopting the standards.

Representative WILLIAMS. The fact is, it hasn't been entirely effective so far.

Mr. FARISH. No, sir; I certainly agree with you. It has not.

Representative WILLIAMS. It is a very defective system because of perhaps local conditions, political among others, and the element of price that enters into it, and a disagreement, perhaps, as to the kind and character of standards that should be used in order to acquire the best and most efficient results, and all of those things; with some States not seeing the necessity for any legislation at all, now there is a very serious question of whether it won't come to the question of the Government itself trying to do those things if we are going to preserve this great natural resource.

Mr. FARISH. I agree with your statements except as to the word "very." I don't think the practice is very poor or very bad, if I may differ, because I think great progress has been made and is being made every day, and that is true particularly in Texas and in New Mexico, where State regulatory bodies have been steadily on the job. Most of our oil in Texas today—in fact I would say from our new fields all of our oil in Texas today—is produced with a minimum of

waste. Now by minimum of waste I mean minimum of waste under the standards as they are understood and are prevailing today. I don't mean under the most exacting standards. We haven't quite reached that in Texas, but we have innumerable oil fields in Texas today that have started out from the initial well with 20-acre, 30-acre, or 40-acre spacing, and production has been controlled and waste eliminated from the initial well opened in the development of those fields, so while there are some exceptions, and while there are some practices that are subject to criticism, and where the standard of production efficiency hasn't been maintained, my point is that they are getting less every month, they are getting less every year, and we are attaining a higher degree of efficiency.

Representative WILLIAMS. On the other hand, if it is necessary, as you seem to think, and I agree with you about that, that business should be more or less standardized, after all, if we are going to establish the standard why should not the Government of the United States establish it rather than have a number of different standards set up in the States. Have it uniform.

Mr. FARISH. Have the United States Government regulate the production controls in the States?

Representative WILLIAMS. Yes.

Mr. FARISH. I don't think it is necessary, and of course I must say personally I am opposed to the United States Government attempting to regulate any operation in the States that the States can get along reasonably well without.

Representative WILLIAMS. Of course, you are aware of the fields along that line that they have already entered, such as agriculture, coal, and so on.

Mr. FARISH. Yes; I am aware of them, but I can't say that I endorse it.

Representative WILLIAMS. I was wondering if there was any difference in principle in that from what there was in the effort to regulate the oil business, standardize it, in order to extend and get the greatest amount of good for the people out of it.

Mr. FARISH. That opens up a new subject, Mr. Williams.

Representative WILLIAMS. I won't press that.

Mr. FARISH. I would just like to make this slight comment in passing, though, that so far the United States Government does not have to make any contribution from the Treasury to anybody in the oil industry, in any particular.

Representative WILLIAMS. I had no idea of that. That wasn't the idea.

Mr. FARISH. If you put us in agriculture, then we will be getting our hands into the Treasury some way.

Representative WILLIAMS. But the idea was to regulate, as State law does regulate more or less, the output, and therefore affects the price just the same. In other words, I say again if you are to have it standardized or regimented, if we want to use that word, I don't see much difference whether it is done by the State or Federal Government, except one of them would be uniform throughout the country and the other is kind of a crazy quilt affair among the different States.

Mr. FARISH. I see.

Acting Chairman REECE. Mr. McConnell, did you have any questions?

Mr. McCONNELL. No; I haven't.

Acting Chairman REECE. Representative Mapes, of Michigan, and Representative Disney, of Oklahoma, who are students of the oil problem and will take an active interest in legislation dealing with it, have been able to attend this phase of the hearing, and the committee has been very glad indeed to have them sit in, and I wonder if either of you want to ask any questions.

Representative DISNEY. Not I. I am afraid if Mr. Williams and I got in an argument, we would prolong this hearing. [Laughter.]

Representative WILLIAMS (to Mr. Farish). I want it understood I am not expressing any opinion. I was asking these questions and presenting these problems.

Mr. FARISH. I fully understand, sir.

Acting Chairman REECE. Do you have any questions, Mr. Snyder?

Mr. SNYDER. I might have one, Mr. Chairman.

Mr. Farish, I believe that you suggest that these States adopt proration control, is that your suggestion?

Mr. FARISH. I am not making any suggestion. I said that all of these States eventually are going to have conservation laws to provide for the production of oil without waste; and they probably will take proration control at least until the time that they adopt this so-called optimum rate of production, which is a standard of efficiency.

Mr. SNYDER. Well, now today, under the present situation, a State like Illinois acts as a counterbalance to the other highly prorated States, isn't that true?

Mr. FARISH. Acts as a counterbalance? - I don't know what you mean by that.

Mr. SNYDER. The unregulated production in Illinois produces cheap oil and that acts as a counterbalance against any high price that may be paid for oil in Texas and Oklahoma and the other regulated States.

Mr. FARISH. Well, it might be considered that way. What they are doing in Illinois, they are producing their oil in a wasteful way and selling it at a relatively lower value than the oil in other States is bringing.

Mr. SNYDER. If all the States adopted proration and conservation as has been described here, the methods used by them, what would you suggest as a method of operation to counterbalance extremely high prices of crude oil? What do you think should be substituted for the influence of the unregulated State production?

Mr. FARISH. We had that argument just awhile ago, when I tried to state what I felt was the mental attitude or the attitude of the Government officials in Washington who took some responsibility for establishing a fair price for crude.

Mr. SNYDER. Do you think we need any legislation along that line?

Mr. FARISH. Along what line?

Mr. SNYDER. Of keeping the price of crude oil from going above certain levels.

Mr. FARISH. You mean price fixing?

Mr. SNYDER. Any maximum price fixing.

Mr. FARISH. No, sir; I do not.

Mr. SNYDER. You feel that the status quo of Federal participation in the petroleum industry is to be maintained in the future? You don't want to see any more regulation and you don't want to see any less regulation.

Mr. FARISH. I think that is correct.

Acting Chairman REECE. You may proceed with your statement.

Representative WILLIAMS. Let me see if I understand before we finally leave this question of the effect upon price ultimately of the application of strictly engineering principles to production conservation principles. As I understood you, let's see if I have it correct, that that would not materially affect the price.

Mr. FARISH. That is correct. The average price in industry from the beginning to date has been of the order of around \$1.20 a barrel. I look for it to stay around that for many years in the future.

Representative WILLIAMS. And if we had the strictly engineering principles applied to production, having in view conservation alone, that would work out a satisfactory and reasonable price and satisfy the demand, the market demand—

Mr. FARISH (interposing). At a reasonable price.

Representative WILLIAMS. At a reasonable price without any material increase in the price.

Mr. FARISH. That is correct. Your demand may change a little bit. Certainly we may use less heavy oils and convert more of the oil into gasoline than we are doing today. I think that is correct, sir. That is my judgment.

I attempt to deal with that subject a little, looking into the future, right here in the next subject on my paper, a correct price objective for crude oil.

All these considerations culminate in the question, "What is a correct price for crude oil?" That is to say, "What are the objectives which a price for crude oil ought to seek in order to be considered correct?" In undertaking to answer this question, I start from four facts:

1. The industry is now, and for some time past has been producing a supply of petroleum fully adequate to meet the current demand.

2. At the same time, the current rate of production is probably above the optimum rate, although proration procedures are improving.

3. Demand may be expected to grow, though presumably not at so rapid a rate as during the past 14 years.

4. The price of crude petroleum has in general been high enough over the last 14 years—

Now, this is the point I would like to emphasize, "the price of crude petroleum has in general been high enough over the last 14 years to stimulate the exploration necessary to increase the proved reserves from about 5,500,000,000 reserves to something between 17,000,000,000 and 22,000,000,000 barrels."

Reasoning from these facts—now the average price of gravity crude has been something under \$1.20 a barrel, but it is something under \$1.20 a barrel. That is the average weighted price, and during this 14 years, due to the art of finding, improving, due, however, also to the development of conservation and proration at a price of less than \$1.20 a barrel this industry has practically quadrupled its

reserves, built them up from a little over 5 billion to over 20 billion, and at the same time has furnished all the demands made on it. I think the total is something like 11 billion barrels that have been produced and sold, so that the price in this time, in this period, 14 years, an average of something under \$1.20 a barrel has been sufficient to accomplish two purposes, supply the demand and practically quadruple the reserves, so I say the price must have been pretty well a correct price to have accomplished those things.

Acting Chairman REECE. Has there been any considerable amount exported?

Mr. FARISH. During this period?

Acting Chairman REECE. Yes.

Mr. FARISH. Oh, yes; the exports have been considerable every year, ranging something like maybe—I am only giving an approximate figure—over this period of time somewhere around 350 to 450 barrels a day of crude and products, which is a considerable amount of oil, roughly 10 percent, or more than 10 percent, a little more than 10 percent of the production.

Reasoning from these facts, I personally reach the conclusion that the correct price is the price which will keep the following factors at work and in balance from a public point of view; production, market demand, prevention of waste, rate of discovery, size of proved reserves. In other words, it is a price sufficiently high to bring out a supply adequate to satisfy the growing demand, and at the same time to stimulate the discovery of new fields to a point where the optimum rate of production will balance market demand. That means a price high enough to keep up the process of adding to the proved reserves until they reach a point sufficiently great so that the future may be considered to be adequately safeguarded.

This is exactly what the crude oil price during the last few years seems to be accomplishing. The rate of increase in reserves since 1924 has been adequate, in spite of the large requirements; on the other hand, it has not been so rapid as to disturb the balance of the industry. That means that on the average the price of crude oil over this period must have been not far from correct. If conceivably the cost of discovering and producing oil should increase during the coming years, a higher price for crude might become necessary. On the other hand, if proved reserves should increase steadily in the near future to some such figure as 30 or 35 billion barrels, a somewhat lower price should then serve to maintain the equilibrium.

Of course you understand that the foregoing is my conception of what the general objective of the crude-oil price level should be. It is in no sense a formula for determining a specific price.

I think the record of the past few years justifies every hope that a continuation of this process will be a reality. I have a discussion of proration and market demand. I am not particular about enlarging on that or reading it, unless you gentlemen are interested in some questions on it.

Acting Chairman REECE. But you wish it to appear in the record as part of your statement?

Mr. FARISH. Well, the whole paper is in the record, Mr. Reece, and I have been only reviewing it because we started out in that way in order to bring up orderly, if we could, the discussion of the various points involved.

Acting Chairman REECE. That is satisfactory, if you wish to proceed.

Mr. FARISH. I see no objection to passing that.

Then I come to the concluding chapter in my paper, which is: Meeting the Problems.

MEETING THE INDUSTRY'S PROBLEMS

Mr. FARISH. There are no easy answers to these problems. In any situation involving so many different people and interests, the attainment of complete equity is an impossible ideal under any set of industry or governmental policies. Critics of the regulatory bodies must remember that appreciation of the need for conservation has been a slow growth in the minds both of men in the industry and of the general public, and that general acceptance of this conservation principle has by no means been either simultaneous or universal.

But there are some directions in which substantial improvement might be made. For one thing, more attention must be given to the proper spacing of wells to get optimum production in each field with minimum drilling expenditure. At the same time it is also important to insist on higher standards of administrative procedure on the part of the regulatory commissions in order to stamp out the pernicious practice of granting special favors and exceptions.

In general, State conservation and proration is a sound concept. Improvement in administration is possible. Elevation of purpose, clarification of objectives, and strengthening of personnel, standards, and procedure are all vitally necessary. Although there are valid grounds for criticizing many of the actions of the State commissions, I want to emphasize the fact that notable progress toward conservation has been made under this system. I am confident that this progress will continue.

There is another aspect of the problem which ought to be looked at, and that is the matter of price. There is some reason to believe that in situations such as that which developed in 1938 and the first half of 1939, oil companies have perhaps refrained too much from the use of price as a means of adjusting supply and demand. Comment has already been offered on the way in which crude prices are made. I am here expressing simply my own personal opinion to the effect that there ought to be more responsiveness in the posted price of crude to such changes in basic conditions as became evident in this recent period. It is recognized that the disastrously low crude prices, resulting from the flood of overproduction which happened to coincide with the bottom years of the depression, naturally resulted in an overemphasis on price stability when corrective mechanisms were first established. But it now seems wise to move in the direction of exercising partial control over supply through a more realistic price policy. The proration approach to the problem aiming at the concept of optimum output is vital; but at the same time I believe it will be useful to the industry to make some approach to the problem from the other end, namely, by the method of price.

Mr. O'CONNELL. I am not entirely clear just exactly how that could be done. Could you be a little more specific on that point?

Mr. FARISH. What I mean to say there, Mr. O'Connell, is that there is a tendency in the industry today that crude-price changes, particularly downward, sometimes upward, looking beyond product-price

changes, or product realizations, and what I am suggesting there is my personal belief and opinion that the proration authorities would be helped in their interpretation of market demand and market conditions if price changes were more frequent and of perhaps lesser amounts than is now more or less current in the operation of the industry. To put it another way, no one in the oil-industry States wants to initiate a price cut; literally I mean no individual wants to be responsible for initiating a price cut. It is a very unpopular thing to do, and it brings about all kinds of reactions, most of them unpleasant, so there is a tendency to delay the interpretation of a market condition, and the delay makes it worse and, finally, when it does come, why, it is a little bigger than it would have been if it had been taken promptly when the market pressures first began to exert themselves.

Mr. O'CONNELL. Well, specifically, would you mean that had the posted price of crude reacted a little differently last summer than it did, it might not have resulted in the action taken by the oil-producing States in August?

Mr. FARISH. I don't think it would.

Mr. O'CONNELL. You don't think it would what?

Mr. FARISH. Would have resulted in the action of the oil-producing States if the price had been cut in the areas where the crude was going to market; had they cut prices earlier and small cuts been made, why the adjustments would have taken place gradually and you wouldn't have had any such performance as you speak of.

Mr. O'CONNELL. You mean if you had a 5-cent cut in crude instead of 10 last summer?

Mr. FARISH. If it had come earlier and particularly in the sore spot areas, I think it would have had a gradual checking and adjustment of the situation rather than the situation that developed. Do I make it clear?

Mr. O'CONNELL. Yes; I believe so.

The practical situation is that the petroleum industry is in a period of transition and that, despite serious doubts as to the value of some of the things done in the name of proration, it does no good to look for short roads to perfection. The better approach to the problems of the oil industry is to seek improvement of the existing proration procedure and mechanisms and the existing standards of performance and equity, and for all parties concerned to seek a better understanding of the whole problem along broad lines of industrial statesmanship in contrast with narrow lines of temporary, sectional, or merely selfish interest. Progress in this better approach will have to be made by seeking out and taking the next logical steps, rather than by trying to reform the whole procedure from some new angles. Such "next logical steps" might reasonably include the following:

- (1) More attention to the development and enforcement of suitable drilling patterns for each field.

- (2) More attention to the determination of allowables based on the optimum rate of production for the field, with necessary consideration to the oil in place rather than to the individual wells.

- (3) More attention to the determination of supply for a State on the basis of the optimum production of that State as established by the aggregate optimum production of the individual fields.

(4) Continued efforts on the part of the oil-compact States to get other oil-producing States into the compact group, and to improve their own conservation laws.

(5) Further development on the part of the compact States of common standards or production efficiency that will bring a closer approach to optimum production.

(6) Development at the same time on the part of these States of better standards to assure equity as between owners of property in the same oil field and as between different oil fields.

Mr. McCONNELL. Mr. Farish, before you go on, I don't believe your answer to Mr. O'Connell was entirely clear to him. I wonder if I could give you my impression of that answer and see if that clears up the situation?

Mr. FARISH. Delighted.

Mr. McCONNELL. When a price change has been made in the past by some company with a posted price, he reduces that posted price perhaps to the extent of 15 cents a barrel for example, that price is reduced, as I understood you this morning to say, after a large amount, perhaps as much as 200,000 barrels of oil per day is finding market under the posted price, at which time the companies with their posted prices are at a great disadvantage, is that right?

Mr. FARISH. That is correct.

Mr. McCONNELL. Now your suggestion is that perhaps it would be better to reduce that price when you find first—using figures as similes here—when you first find 50,000 barrels seeking market under the posted price by a reduction of 5 cents instead of 15 cents. Is that the purport of your answer?

Mr. FARISH. That is correct. That is what I am attempting to state in the paragraph we are arguing about.

Mr. O'CONNELL. I can understand readily that would be a different policy than the policy the companies now pursue. I don't understand that it would necessarily have the effect that you suggest. I mean, you reduce the price of crude 5 cents instead of 15. Do you mean that that reduction would make it unnecessary ultimately to reduce it to 15?

Mr. FARISH. I think it would, unless the price level generally was too high.

Mr. O'CONNELL. When you reduced the price 15 or 20 cents a barrel, isn't that because the price level of the posted price is that much too high?

Mr. FARISH. Sometimes it is. Sometimes it is done because of the break-down in relative crude prices. In other words, I will put it this way. I don't know any commodity where a scale of a few percent, 3, 4, 5 percent, at we will say 20-percent discount, doesn't bring down the value of the whole to the few percent. Now, this price posting system and the general desire, I presume, I will put it that way, or the general feeling of everybody, reluctance to cut the price of crude, makes the buyers, even, hang on to a price level longer than they should, to the point where they permit not 2 or 3 or 4 percent, but in the cases that we are just speaking of, where as much as 600,000 out of less than 3,000,000, or 20 percent, were going at cut prices.

Mr. O'CONNELL. You are arguing for more flexibility in the posted price system to more quickly reflect what the real price is.

Mr. FARISH. Correct, sir, that is exactly the point, to remove some of the rigidity in the changing of prices of crude, and that rigidity has grown, as I have tried to explain, since the code days. These regulatory fellows think it is their particular job to hop on anybody that cuts the price.

Mr. O'CONNELL. Of course, if you didn't have a posted price system at all, I guess there would be no problem at all, would there, on flexibility at least?

Mr. FARISH. No; I think there wouldn't. I think it would be a catch-as-catch-can basis. I think the producer would suffer in that case.

If both the oil industry and the proration authorities will move in the general direction which these suggestions indicate, and if at the same time the oil companies will adjust their posted crude prices more rapidly to such changes in basic conditions as we have seen periodically in recent years, substantial progress will be made toward smoothing out the present difficulties which stand in the way of effective proration and toward preventing the recurrence of periods when large volumes of crude are being sold at prices below the posted prices for similar gravity being paid for the greater part of the daily crude production.

Just one word in closing, I do not want to claim for 1 second that proration is against the interest of the large oil companies. It is in their interest; but it is also in the interest of the citizens of the producing areas, in the interest of the State and local governments in those areas, and in the interest of the consuming public.

It has been called to my attention that I didn't emphasize that it is in the interest of the small producer, but I would like to so emphasize here. I thought it was so clear and so definite in writing this statement that it was in the interest of the small producer that I didn't emphasize his position in this list.

It is also most emphatically in the interest of national defense. Furthermore, as regards my own company, the Standard Oil Co. (New Jersey), it is a big company in the oil industry, and I have not the slightest hesitation in saying that we are in business to make a profit. But we are in business not merely today and tomorrow, but for a long time to come, and we want to make profits not merely today and tomorrow, but also for a long time to come. Therefore, we can and do look at our problems with a long-run perspective; and in the long run we know that for a company as big as ours its welfare, that is, the welfare of its stockholders and its employees, is unavoidably bound up with the welfare of the country as a whole. When the big oil companies accepted the idea of proration they voluntarily submitted to restraints which they frequently did not like, restraints which made them forego many opportunities for immediate profits, restraints which were directly contrary to their ingrained habits of thought. But they did it because they figured that in the long run these restraints were going to be good for them. They sacrificed immediate profits in order to gain greater assurance of stability for the future. In the light of all the circumstances, I think it is not an overstatement to say that the present proration program sponsored by the oil industry, imperfect though it may be in many respects, represents an important act of real industrial statesmanship.

Acting Chairman REECE. Are there any further questions?

Mr. O'CONNELL. And for that industrial statesmanship, I think we can give former President Coolidge a substantial amount of credit.

Mr. FARISH. For initiating the idea—check, sir.

Mr. O'CONNELL. I have a question that does not relate particularly to your statement but it does involve, I believe, your company and if you can answer it, I wish you would.

Your company operates a substantial fleet of tankers, as I understand it.

Mr. FARISH. Yes, sir.

Mr. O'CONNELL. Are those all operated under the American flag?

Mr. FARISH. No, sir.

Mr. O'CONNELL. Those that are not, are they operated through a subsidiary corporation under another flag?

Mr. FARISH. The general policy of our company in that respect, Mr. O'Connell, is that we have a certain number of ships that are registered under the American flag and operate in American coastwise trade.

Mr. O'CONNELL. I take it ships operating in coastwise trade have to operate under the American flag, don't they?

Mr. FARISH. Yes, sir.

Now, in foreign service we have ships under many flags. The general custom has been that each country in which we have subsidiaries and each company that we own in the country, owned enough shipping practically to take care of their own supply business. That is true even of small countries like Denmark, Sweden, and so on. So that of some 200 tankers that we operate, I think approximately 70 of them are owned and operated in the United States, under the United States flag, and the balance are under various flags.

You asked a question the other day of Mr. Pew, I think—to carry this on a bit—about the Panama Fleet. We had some years ago some twenty-odd boats—23, I think it was—that were built in Germany. A good many of them were owned by a German company, and we were able through arrangements with the German Government—I don't think all of these were then under the German flag, but there were 23 in the eventual transfer—to transfer the existing fleet then under the German flag under the flag of the City of Danzig, which was a free state set up under the League of Nations. We were enabled by that to get certain property out of Germany and get it under another flag.

Some 4 years ago we began to worry a little bit whether the Free State of Danzig would remain free; and we decided it would be wise to transfer that fleet to another flag, so we transferred that fleet to the Panama flag, and that fleet is now operated under the Panama flag.

There is one thing further I would like to tell you in that connection. We can't operate American-built, American-manned steamers, in overseas service in competition with ships built and operated by foreigners. Our ships built in the United States cost us roughly nearly twice the cost of ships built abroad. And it is perfectly obvious, too, that in selling goods as we do as merchants to Italy, Germany, France, Denmark, and so on, they want some business back if they can get it, so we have ships built in these various countries. But at any rate,

the cost factor is almost half of what it is in this country, and the operating-cost factor is about one-third less, so that you can see in competition with an American-owned and American-manned boat going overseas from our ports or from South American ports to Europe the American boat just is out of business. It can't operate. Therefore, everybody in the petroleum industry is forced to operate in overseas trade in foreign bottoms.

Mr. O'CONNELL. Well, then, the reason that you have ships under the Panamanian flag, for example, is in order to get the advantage of the lower wages and other things that you can get by not using American citizens in your boats.

Mr. FARISH. That is correct. It is a cost necessity with us. It is a competitive necessity.

Mr. O'CONNELL. So that the only ships that you operate under the American flag are those which are in the coastwise trade?

Mr. FARISH. That is correct.

Mr. O'CONNELL. Which have to be operated under the American flag by law.

Mr. FARISH. We sometimes have some of our American boats in foreign service, but it is not a normal operation. It is an emergency operation.

Mr. O'CONNELL. Do you still build tankers both in this country and abroad?

Mr. FARISH. Yes, sir.

Mr. O'CONNELL. And when you build them in this country is there a subsidy to some extent to equalize the cost of construction?

Mr. FARISH. No, sir.

Mr. O'CONNELL. None at all?

Mr. FARISH. None whatever. If you are talking now about the Navy tankers—

Mr. O'CONNELL (interposing). I understand, in the Navy situation I take it, you built tankers having special qualifications not needed for your own purposes, and you were given additional compensation so that they would be available in time of war.

Mr. FARISH. That is not a subsidy in any sense.

Mr. O'CONNELL. I understand that, but I didn't know but what there was a construction subsidy on building ships.

Mr. FARISH. There may be for ordinary cargo boats, but so far as I know, nobody in the oil industry ever got any subsidy. In fact, the oil industry has never had its hands in the Federal Treasury that I know of.

Mr. O'CONNELL. I might suggest that I think the depletion allowance is in the nature of a subsidy.

Mr. FARISH. If you think that, that is all right with me.

Mr. O'CONNELL. That is all I meant. I didn't want to argue about it.

Representative REECE. Are there any further questions?

On behalf of the committee, I wish to thank you for the time you have given it and to say that the contribution that you have made has been very helpful in the study.

Mr. FARISH. Mr. Chairman, before adjourning, may I make just one brief statement? I, of course, want to thank the committee for the opportunity that has been given me and that has been given the

representatives of the oil industry as nominated by the American Petroleum Institute to come down here and tell you their story of the oil industry, and its functioning as we see it. We greatly appreciate that opportunity.

Now, having concluded my appearance as an industrial witness and as president of the Standard Oil Co. of New Jersey, I would like to make this statement:

Now that these hearings on the oil industry are over, I should like to step out of my role as a representative of the oil industry or as president of the Standard Oil Co. (New Jersey). I want to make a few personal remarks about my reaction as a citizen to these hearings and on the problems of full employment of men and capital.

With regard to these hearings let me say that this was an experimental inquiry. It represented an effort to bring business and Government into a friendly round-table discussion of the genuine problems of the industry. It was a great opportunity for Government to show business that public officials were more interested in developing facts and the full implications thereof than they were to obtain information to support some pet piece of legislation or some preconceived theory of economics or social reform. It was a chance for business to give a coordinated picture of its operation and policies without the "I object" approach of counsel in the courtroom. This committee has an opportunity to make a real contribution toward establishing mutual confidence and respect between business and Government, an accomplishment which would have more effect in putting men and capital to work than anything else you might do. Your great opportunity also involves a great responsibility to show the public that you have listened with open minds; that you are anxious to see the patterns of American industry revealed as they are, and to judge those patterns in terms of their contribution to employment of labor and capital. In studying the patterns of American industry I expect that you will evaluate the services rendered to consumers by industry, especially the cost reductions which have made low prices possible.

As a good southern Democrat of long standing I am slow to approve drastic changes in Government policies and principles. As a businessman myself and also as a student of the reactions of businessmen, I urge you to consider the emotions and reactions of those who risk capital and employ labor. Do you realize that too drastic changes cause them to lose courage? Do you realize that once changes have been made—and there have been many in the past 10 years—stability of direction is essential to the renewal of courage? If Government would show more stability of purpose and firm adherence to principle, one great, if not the greatest, obstacle to the full employment of men and capital would be removed.

I hope therefore that your committee will review the real impact of Government policies on uncertainty and their relationship to the will and ability of business to employ both labor and capital more fully.

I thank you very, very much for the opportunity to make my final speech.

Acting Chairman REECE. We are very glad to have these additional words. It has also been suggested that we hope the committee may justify it, and I think its final results may do so.

(The witness, Mr. Farish, was excused.)

Acting Chairman REECE. I understand the program of the committee is to resume the insurance hearing tomorrow, this concluding this phase of the committee's hearings. The witnesses who are expected to be called tomorrow being Mr. Parkinson, president of the Equitable Life, and Mr. Coburn, vice president of the Southwestern Life Insurance Co.¹

The committee will stand in recess until tomorrow morning at 10:15.

(Whereupon, at 3:45 p. m., a recess was taken until 10:15 a. m. the following day, Thursday, October 26, 1939.

¹ Testimony on the insurance business, on October 26 and 27, 1939, is included in Hearings, Part 13.

APPENDIX

EXHIBIT No. 1296

[Prepared from answers to the Committee questionnaire]

DEPARTMENT OF JUSTICE,
Washington, D. C., October 5, 1939.

MEMORANDUM FOR SENATOR O'MAHONEY, RE: WYOMING GASOLINE PRICES

Answers to the Committee's questionnaire¹ on costs of gasoline f. o. b. refinery gate at the refineries of certain major oil companies may be summarized as follows:

Reporting company	Place	Cost per gallon in cents
The Texas Corporation.....	Cody, Wyoming.....	7.24
The Texas Corporation.....	Casper, Wyoming.....	5.88
Standard Oil Co. (Ind.).....	Casper, Wyoming.....	6.41
The Texas Corporation.....	Calpette, Wyoming.....	6.88
Standard Oil Co. (Ind.).....	Grable, Wyoming.....	5.00
Consolidated Oil Corp.....	Parco, Wyoming.....	5.53
Continental Oil Company.....	Glenrock, Wyoming.....	4.87
Continental Oil Co.....	Denver, Colorado.....	5.97
Continental Oil Co.....	Lewiston, Montana.....	7.08

In answer to question 29 of the questionnaire regarding the formula used in arriving at-tank wagon prices by the reporting companies and the adoption and use of the basing point system, it is interesting to note that the Continental Oil Company answered as follows:

"In the Rocky Mountain Region, where the reporting company's products have long been established, the tank wagon prices used are based upon the competitive tank car prices to which is added state and federal taxes, an amount for marketing expenses, generally 3 cents a gallon, and freight (using nearest ½ cent), also upon the competitive prices of a large number of scattered refining companies each serving a limited area. Unlike other sections of the United States, the crude production and refining facilities of the Rocky Mountain Region are not confined to one area which could act as a basing point for the rest of the region. The effect of such competition, together with the competition of transport haulers trucking gasoline into this region from other areas, has resulted in prices which are generally lower than prices based on mid-continent or West Coast prices."

Then the Continental Oil Company submitted typical methods of determining tank wagon prices. They submitted the following information:

Thermopolis, Wyoming:	
Casper basing price.....	9.00¢
Freight.....	1.35
State and federal taxes.....	5.00
Margin to cover marketing cost.....	3.00
Total.....	18.35
Tank wagon price.....	18.50

¹ The Committee questionnaire for oil companies is included, as "Exhibit No. 1137," in Hearings, Part 14, appendix, p. 7426.

Milford, Utah:

Los Angeles basing price	7.20¢
Freight	4.36
State and federal taxes	5.00
Margin to cover marketing cost	3.00

Total	19.56
Tank wagon price which should be used	19.50
Price used to meet local competition	19.00

Missoula, Montana:

Portland basing price	8.00¢
Freight	4.22
State and federal taxes	6.00
Margin to cover marketing cost	3.00

Total	21.22
Tank wagon price which should be used	21.00
Price used to meet local competition	19.50

Boise, Idaho:

Portland basing price	8.00¢
Freight	4.00
State and federal taxes	6.10
Margin to cover marketing cost	3.00

Total	21.10
Tank wagon price which should be used	21.10
Price used to meet local competition	20.10

The Socony-Vacuum Oil Company, Inc., in answer to question 29, stated:

"The general practice of our Company and our domestic subsidiaries in the sale of gasoline is to sell on the basis of our own posted price as determined and posted by us. With two local exceptions, namely, in the States of Colorado and Wyoming, our forms of contract are on this basis. We estimate that at the present time sales on bases other than our own posted prices amount to less than 1% of our volume.

"Where we sell on a basis other than our own posted price the need for the deviation comes chiefly from the demands of the customer.

"Even in Colorado and Wyoming it will be noted from the contracts furnished in response to question 28 we are not confined to the Group 3 price. It is subject to reduction due to market conditions.

"Our shipments to points in Colorado and Wyoming move principally from our refineries at Augusta, Kansas and Casper, Wyoming."

The Standard Oil Company (Indiana) in answer to question 29 stated as follows regarding Wyoming:

"In the states of Montana, Colorado, Wyoming and Oklahoma, the company's volume is so small that no attempt is made to establish a normal price structure, but rather the company follows from time to time the prices established by the company having the largest or most complete distribution or local competition established by anyone having sufficient volume to affect the company's business.

"The company does not engage in the jobber business and has never, outside of Montana, Wyoming, and Colorado, had a type or form of jobber contract. Such few jobber contracts as the company has are primarily based on the company's prices to its dealers at point of delivery or both. In rare cases and upon the insistence of the purchaser, the price may be based upon the Group 3 spot tank car market as carried in the trade journals. Not more than three or four of such contracts have ever been in effect.

"In the states of Montana, Wyoming and Colorado, the company's form of jobber contract currently in use gives the buyer the benefit of the lowest net cost to him, computed in any one of four methods, namely, (1) a certain amount below seller's price to its dealers; (2) average tank car price, Group 3, plus freight from Group 3, and less freight from supplying refinery; (3) seller's tank car price f. o. b. Portland, Oregon, plus freight from Portland, and less freight from supplying refinery; (4) seller's own spot tank car price."

SNYDER.

EXHIBIT I.—Gasoline freight rates (railroad) as of 8-14-39

Points of distribution	Tank wagon prices as of 8-14-39	Points of production					
		Casper		Glenrock		Parco	
		Freight rate in cents					
		Per cwt.	Per gal.	Per cwt.	Per gal.	Per cwt.	Per gal.
Cheyenne.....	15.5	29.5	1.947	25.5	1.683	24.5	1.617
Laramie.....	15.5	36.5	2.409	36.5	2.409	17	1.122
Medicine Bow.....	16	36.5	2.409	36.5	2.409	8	.528
Parco.....	18	36.5	2.409	36.5	2.409		
Rawlins.....	18	36.5	2.409	36.5	2.409	5.5	.363
Rock Springs.....	18.5	36.5	2.409	36.5	2.409	17.5	1.155
Evanston.....	19.5	68.5	4.521	68.5	4.521	35	2.310
Kemmerer.....	19.5	64	4.224	64	4.224	31.5	2.079
Wheatland.....	15.5	17	1.122	13	.858	36.5	2.409
Douglas.....	17.5	8.5	.561	5	.330	36.5	2.409
Glenrock.....	17.5	5	.330			36.5	2.409
Casper.....	17.5			5	.330	36.5	2.409
Moneta.....	18.5	15	.990	19	1.254	51.5	3.399
Riverton.....	19	19	1.254	23	1.518	55.5	3.663
Lander.....	19	22	1.452	26	1.716	58.5	3.861
Worland.....	19	25.5	1.683	29.5	1.947	62	4.092
Basin.....	19	30.5	2.013	34.5	2.277	67	4.422
Cody.....	19	41.5	2.739	45.5	3.003	74	4.884
Torrington.....	15.5	23.5	1.551	19.5	1.287	29	1.914
Lusk.....	17.5	16.5	1.089	12.5	.825	49	3.234
Newcastle.....	19.5	30.5	2.013	30.5	2.013	67	4.422
Gillette.....	20	35	2.310	35	2.310	71.5	4.719
Buffalo.....	19.5	26.5	1.749	26.5	1.749	63	4.158
Sheridan.....	19	26.5	1.749	26.5	1.749	63	4.158

NOTE.—The Per Gallon rates shown are figured on a basis of 6.6 pounds per gallon.

¹ Rates bearing this reference mark are either combinations of other rates, or are taken from the Wyoming P. S. C. Maximum Petroleum Scale. No doubt traffic does not actually move between these points so there is no necessity to publish through commodity rates.

Authority: Wyoming Public Service Commission.

Crude oil price schedule—Continued

[illegible]

	.75	.85	1.00	1.085	.85
Lance Creek					
Lander					
Lost Soldier					
Mule Creek					
Oregon Basin	1.50				
Osage					
Poison Spider					
Rox Lake			1.00		
Rock Creek		1.12		1.085	.85
South Casper Cr.					
Spindle Top					
Warm Springs					
West Mule Cr					
Wertz					

1 Aug. 1.

(7) Date.

Sept. 5, 1936.

Below 18.

Dec. 21, 1935.

Salt Creek schedule.

Aug. 6, 1934.

Crude oil price schedule—Continued

Field	1932							1933									
	Apr. 11	May 11	June 1	June 24	Dec 16	Dec. 20	Jan. 18	May 8	June 17	July 8	Aug. 25	Aug. 26	Sept. 6	Sept. 7	Sept. 9	Sept. 29	Sept. 30
Salt Creek, Dutton Creek, La-Barge, Midway:																	
Below 29	.76					.53	.28	.25	.28	.38		.48		.58	.73	.84	
29-29.9	.78					.55	.30	.25	.30	.40		.50		.60	.75	.86	
30-30.9	.80					.57	.32	.25	.32	.42		.52		.62	.77	.88	
31-31.9	.82					.59	.34	.25	.34	.44		.54		.64	.79	.90	
32-32.9	.89					.61	.36	.25	.36	.46		.56		.66	.81	.92	
33-33.9	.86					.63	.38	.25	.38	.48		.58		.68	.83	.94	
34-34.9	.88					.65	.40	.25	.40	.50		.60		.70	.85	.96	
35-35.9	.90					.67	.42	.25	.42	.52		.62		.72	.87	.98	
36-36.9	.92					.69	.44	.25	.44	.54		.64		.74	.89	1.00	
37-37.9	.94					.71	.46	.25	.46	.56		.66		.76	.91	1.02	
38-38.9	.96					.73	.48	.25	.48	.58		.68		.78	.93	1.04	
39-39.9	.98					.75	.50	.25	.50	.60		.70		.80	.95	1.06	
40 and above	1.00					.77	.52	.25	.52	.62		.72		.82	.97	1.08	
Tensleep																	
Badger Basin, 1 Big Medicine Bow:																	
55-55.9																	
56-56.9																	
57-57.9																	
58-58.9																	
59-59.9																	
60-60.9																	
61-61.9																	
62-62.9																	
63-63.9																	
64-64.9																	
65 and above																	
Big Muddy	.98		.98		.75			.25	.45	.55	.65		.75		.90	1.01	
Black Mountain	.85																
Byron																	
Dallas-Derby																	
Elk Basin	1.20		1.10		.87		.62		.62	.72	.82		.92		1.07	1.18	
Frankie Light	.61						.31	.25		.41		.51		.61	.76	.87	
Frankie Heavy	.51						.20	.20		.30		.40		.50	.57	.62	
Garland																	
Grass Cr. Light	1.20		1.10		.87		.62		.62	.72	.82		.92		1.07	1.18	
Grass Cr. Heavy	.50		.45		.45		.35		.35	.40	.45		.50		.57	.62	
Hamilton Dome	.45																
Hidden Dome																	
Lance Creek	1.15		1.15		.92				.80	.80	.80				1.02		1.13

[illegible]

*** Elk Basin plus 10 cents.**

^a No posting local purchases closely follow Salt Cr. 40° above.

Posted field prices for crude oil in fields shown, with dates effective—Continued

Field	1931												1932											
	Jan. 1	Mar. 5	May 14	May 19	June 1	June 2	July 9	July 10	July 24	July 25	Aug. 1	Aug. 18	Aug. 22	Aug. 24	Aug. 25	Sept. 3	Nov. 2	Nov. 3	Jan. 1	Apr. 11	May 11	June 1	June 24	
GASOLINE PRICES																								
CASPER																								
Tank Wagon (Less Tax)	.13	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11	.11	.10	.10	.11	.11	.12	.12	.12	.13
State Gas Tax	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Service Station Charge	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
Service Station Price	.20	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	.17	.17	.18	.18	.19	.19	.20	
CHEYENNE																								
Tank Wagon (Less Tax)	.14	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.12	.10	.10	.07	.10	.11	.11	.14	
State Gas Tax	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
Service Station Charge	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.00	.00	.00	.03	.03	.03	.03	
Service Station Price	.21	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.19	.14	.14	.14	.17	.18	.18	.21	

Posted field prices for crude oil in fields shown, with dates effective

[Compiled by Cyrus O. Wertz, Mineral Production Supervisor]

· (The Midwest Refining Company posts the Mid-Continent schedule from 29° to 37° and above only)

Field	1925			1926			1927			1928			1929			1930											
	Aug. 1	Aug. 28	Sept. 10	Feb. 2	Apr. 29	May 17	Nov. 17	Feb. 22	Mar. 5	Mar. 12	May 7	Feb. 21	July 12	July 26	Jan. 25	Feb. 1	May 20	May 21	Feb. 16	Apr. 10	Apr. 11	May 1	Oct. 15	Oct. 27	Nov. 1	Dec. 2	
Salt Creek Mid-Continent prices posted by Prairie O. and G. Co.:																											
29°-29° Gravity		\$1.48	\$1.23	\$1.48	\$1.73	\$1.55	\$1.39	\$1.26	\$1.14			\$1.01		\$.95	\$.90	\$1.10			\$.90	\$1.00					\$.69		
30°-30° Gravity		1.56	1.31	1.56	1.81	1.60	1.43	1.29	1.16			1.06		1.02	.96	1.15			.96	1.05					.73		
31°-31° Gravity		1.64	1.39	1.64	1.89	1.65	1.47	1.32	1.18			1.11		1.09	1.02	1.20			1.02	1.10					.77		
32°-32° Gravity		1.72	1.47	1.72	1.97	1.70	1.51	1.35	1.20			1.16		1.16	1.08	1.25			1.03	1.15					.81		
33°-33° Gravity		1.80	1.55	1.80	2.05	1.75	1.55	1.38	1.22			1.19		1.21	1.11	1.30			1.11	1.185					.85		
34°-34° Gravity		1.88	1.63	1.88	2.13	1.80	1.59	1.41	1.24			1.22		1.26	1.14	1.35			1.14	1.22					.89		
35°-35° Gravity		1.96	1.71	1.96	2.21	1.85	1.63	1.44	1.26			1.25		1.31	1.17	1.40			1.17	1.255					.92		
36°-36° Gravity		2.04	1.79	2.04	2.29	1.90	1.67	1.47	1.28			1.28		1.36	1.20	1.45			1.20	1.29					.95		
37° Gravity and above		2.12	1.87	2.12	2.37	1.95	1.71	1.50	1.30			1.31		1.41	1.23	1.50			1.23	1.325					.98		
Balance of Mid-Continent Schedule:																											
37°-37° Gravity		2.12	1.87	2.12	2.37	1.95	1.71	1.50	1.30			1.31		1.41	1.23	1.50			1.23	1.325					.98		
38°-38° Gravity		2.20	1.95	2.20	2.45	2.00	1.75	1.53	1.32			1.34		1.46	1.26	1.55			1.26	1.36					1.01		
39°-39° Gravity		2.28	2.03	2.28	2.53	2.05	1.79	1.56	1.34			1.37		1.51	1.29	1.60			1.29	1.395					1.04		

Posted field prices for crude oil in fields shown, with dates effective—Continued

Field	1925		1926		1927		1928		1929		1930																		
	Aug. 1	Sept. 10	Feb. 2	Apr. 29	May 17	Nov. 17	Feb. 22	Mar. 5	Mar. 12	May 7	Feb. 21	July 12	July 26	July 27	Jan. 25	Feb. 1	May 20	May 21	Feb. 15	Feb. 16	Apr. 10	Apr. 11	May 1	Oct. 15	Oct. 27	Oct. 28	Nov. 1	Dec. 2	
Balance of Mid-Continent Schedule—Continued.																													
40° and above	\$2.36	\$2.11	\$2.36	\$2.61	\$2.10	\$1.83	\$1.59	\$1.36			\$1.40	\$1.56			\$1.32	\$1.65	\$1.32		\$1.32		\$1.43					\$1.07			
40°-40° 9°			2.36	2.61	2.10	1.83	1.59	1.36			1.40	1.56			1.32	1.65	1.32		1.32		1.43								
41°-41° 9°			2.44	2.69	2.15	1.87	1.62	1.38			1.43	1.61			1.35	1.70	1.35		1.35		1.465								
42°-42° 9°			2.52	2.77	2.20	1.91	1.65	1.40			1.46	1.66			1.38	1.75	1.38		1.38		1.50								
43°-43° 9°			2.60	2.85	2.25	1.95	1.68	1.42			1.49	1.71			1.41	1.80	1.41		1.41		1.535								
44° and above			2.68	2.93	2.30	1.99	1.71	1.44				1.76			1.44	1.85	1.44		1.44		1.57								
44°-44° 9°			2.68	2.93	2.30	1.99	1.71	1.44			1.52																		
45°-45° 9°			2.76	3.01	2.35	2.03	1.74	1.46			1.55																		
46°-46° 9°			2.84	3.09	2.40	2.07	1.77	1.48			1.58																		
47°-47° 9°			2.92	3.17	2.45	2.11	1.80	1.50			1.61																		
48°-48° 9°			3.00	3.25	2.50	2.15	1.83	1.52			1.64																		
49°-49° 9°			3.08	3.33	2.55	2.19	1.86	1.54			1.67																		
50°-50° 9°			3.16	3.41	2.60	2.23	1.80	1.56			1.70																		
51°-51° 9°			3.24	3.49	2.65	2.27	1.92	1.58			1.73																		
52° and above			3.32	3.57	2.70	2.31	1.95	1.60			1.76																		
Alkali Butte 1																													
Badger Basin 1																													
Barren Basin 1																													
Big Muddy	2.00	1.75	2.00	2.25	1.85	1.62	1.42	1.25																					
Black Mountain																													
Can 1	.85		.85			.85					.85				.85				.85										
Byron 1	2.25	2.00	2.25	2.50	2.10	1.85	1.65	1.43				1.58			1.46				1.55		1.65					1.35			\$0.85

Posted field prices for crude oil in fields shown, with dates effective

[Compiled by Cyrus O. Wertz, Mineral Production Supervisor]

Field	1914		1915		1916						1917				
	Mar. 1	Feb. 25	Nov. 12	Feb. 1	Mar. 16	Apr. 16	May 19	Aug. 4	Aug. 25	Dec. 2	Dec. 13	Jan. 2	Jan. 8	Jan. 30	Mar. 21
Salt Creek.....	\$.50	\$.50	\$.50	\$.60	\$.60	\$.75	\$.75	\$.75	\$.75	\$.75	\$.75	\$.75	\$.85	\$.95	\$.95
Mid-Continent.....	1.05	.40	.90	1.30	1.45	1.55	1.55	1.25	1.00	1.00	1.10	1.40	1.60	1.70	1.70
Big Muddy.....															
Elk Basin.....															
Grass Creek.....		.75	.75	.75	1.00	1.00	1.10	1.00	.90	1.00	.75	.85	.95	.95	.95
Greybull.....		.75	.75	.75	1.00	1.00	1.10	1.00	.90	1.00	1.10	1.20	1.30	1.35	1.40
Lance Creek.....		1.00	1.00	1.00	1.00	1.00	1.10	1.00	.90	1.00	1.10	1.20	1.30	1.35	1.40
Mule Creek.....															
Pilot Butte.....															
Rock Creek.....															
Torchlight.....															
Warm Springs 1.....		1.05	1.05	1.05	1.05	1.05	1.10	1.00	.90	1.00	1.10	1.20	1.30	1.35	1.40
Field	1917				1918				1919			1920			
	Jul. 6	Jul. 12	Aug. 21	Dec. 30	Dec. 31	Feb. 9	Mar. 21	Jul. 1	Oct. 1	Nov. 21	Dec. 23	Jan. 13	Feb. 3	Mar. 1	
Salt Creek.....	\$1.00	\$1.05	\$1.15	\$1.15	\$1.20	\$1.30	\$1.50	.....	\$1.50	\$1.75	\$2.00	\$2.25	\$2.25	\$2.50	\$2.50
Mid-Continent.....	1.70	1.70	2.00	2.00	2.00	2.00	2.25	\$2.25	2.25	2.50	2.75	3.00	3.00	3.50	3.50
Big Muddy.....	1.00	1.05	1.15	1.20	1.20	1.30	1.50	.....	1.50	1.75	2.00	2.25	2.25	2.50	2.50
Elk Basin.....	1.45	1.50	1.70	1.70	1.70	1.70	1.85	.....	1.85	2.10	2.35	2.60	2.60	2.85	2.85
Grass Creek.....	1.45	1.50	1.70	1.70	1.70	1.70	1.85	.....	1.85	2.10	2.35	2.60	2.60	2.85	2.85
Greybull.....	1.45	1.50	1.70	1.70	1.70	1.70	1.85	.....	1.85	2.10	2.35	2.60	2.60	2.85	2.85
Lance Creek.....								.....	1.80	2.05	2.30	2.55	2.55	2.80	2.80
Mule Creek.....								.....	1.80	2.05	2.30	2.55	2.55	2.80	2.80
Pilot Butte.....			1.00	1.00	1.00	1.00	1.32	.....	1.12½	1.37½	1.62½	1.87½	1.87½	2.12½	2.12½
Rock Creek.....			1.70	1.70	1.70	1.70	1.85	.....	1.50	1.75	2.00	2.25	2.25	2.50	2.50
Torchlight.....	1.45	1.50	1.70	1.70	1.70	1.70	1.85	.....	1.85	2.10	2.35	2.60	2.60	2.85	2.85
Warm Springs 1.....								.85	.85	.85	.85	.85	.85	.85	.85

For footnotes, see end of table.

Posted field prices for crude oil in fields shown, with dates effective—Continued

Field	1920		1921										
	Mar. 16	Sep. 16	Jan. 25	Feb. 1	Feb. 5	Feb. 10	May 3	May 21	Jun. 14	Jun. 17	Jun. 27	Oct. 4	Oct. 8
Salt Creek.....	\$2.75	\$2.75	\$2.25	\$1.90	\$1.65	\$1.40	\$1.15	\$1.00	\$.75	\$.65	\$.50	\$.75	\$.90
Mid-Continent.....	3.50	3.50	3.00	2.50	2.00	1.75	1.25	1.00	1.00	1.00	1.00	2.00	1.75
Big Muddy.....	2.75	2.75	2.25	1.90	1.65	1.40	1.15	1.00	1.00	.65	.60	.75	.90
Elk Basin.....	3.10	3.10	2.60	2.25	2.00	1.75	1.60	1.50	1.25	1.15	1.00	1.25	1.45
Ferris-G. P. Dome.....	3.10	3.10	2.60	2.25	2.00	1.75	1.60	1.50	1.25	1.15	1.00	1.25	1.45
Grass Creek.....	3.10	3.10	2.60	2.25	2.00	1.75	1.60	1.50	1.25	1.15	1.00	1.25	1.45
Greybull-Torchlight.....	3.10	3.10	2.60	2.25	2.00	1.75	1.60	1.50	1.25	1.15	1.00	1.25	1.45
Hamilton Dome.....	3.05	3.05	2.55	2.20	1.95	1.70	1.45	1.45	1.20	1.10	.95	1.20	1.40
Lance Creek.....													
Lander.....													
Lost Soldier.....													
Mule Creek.....	2.05	2.05	1.80	1.45	1.20	.95	.95	.80	.80	.70	.45	.70	.85
Osage.....	3.05	3.05	2.55	2.20	1.95	1.70	1.45	1.45	1.20	1.10	.95	1.20	1.40
Pilot Butte.....	2.37½	2.37½	1.8666	1.5166	1.2666	1.0166	.7666	.6166	.3666	.2666	.1166	.40	.5166
Rock Creek.....	2.75	2.75	2.35	2.00	1.75	1.50	1.25	1.10	.85	.75	.60	.85	1.00
Warm Springs 1.....	.85	.85	.85	.85	.85	.85	.35	.35	.35	.35	.35	.35	.35
GASOLINE PRICES, CASPER 1													
Tank Wagon.....							\$.22	.22	.22	.22	.18	.18	.18
State Gas Tax.....							.00	.00	.00	.00	.00	.00	.00
Service Station Charge.....							.02	.02	.01	.01	.03	.03	.03
Service Station Price.....							\$.24	.24	.23	.23	.21	.21	.21
CHEYENNE													
Tank Wagon.....							\$.23½	.23½	.23½	.23½	.20	.20	.20
State Gas Tax.....							.00	.00	.00	.00	.00	.00	.00
Service Station Charge.....							.02	.02	.02	.02	.03	.03	.03
Service Station Price.....							\$.25½	.25½	.25½	.25½	.23	.23	.23

Field	1921			1922				1923				
	Nov. 8	Jul. 18.	Jul. 19	Aug. 4	Sep. 14	Dec. 22	Jan. 15	Jan. 18	Jan. 29	Feb. 2	Feb. 10	Feb. 17
Salt Creek.....	\$1.40	\$1.15	\$0.90	\$0.70	-----	\$1.05	\$1.15	\$1.25	\$1.35	\$1.45	\$1.55	\$1.65
Mid-Continent.....	1.75	1.25	1.25	1.25	\$1.25	1.60	1.70	1.70	1.70	1.80	1.90	2.00
Big Muddy.....	1.40	1.15	.90	.70	-----	1.05	1.15	1.25	1.35	1.45	1.55	1.65
Elk Basin.....	1.90	1.65	1.40	1.20	-----	1.50	1.60	1.70	1.80	1.90	2.00	2.10
Farris-G. P. Dome.....	1.90	1.65	1.40	1.20	.90	1.60	1.45	1.45	1.55	1.65	1.75	1.85
Grass Creek.....	1.90	1.65	1.40	1.20	-----	1.50	1.60	1.70	1.80	1.90	2.00	2.10
Greybull-Torchlight.....	1.90	1.65	1.40	1.20	-----	1.50	1.60	1.70	1.80	1.90	2.00	2.10
Hamilton Dome.....	1.90	1.65	1.40	1.20	.70	1.70	1.25	1.25	1.35	1.45	1.55	1.65
Lance Creek.....	1.90	1.65	1.40	1.20	-----	1.50	1.60	1.70	1.80	1.90	2.00	2.10
Lander.....	.87½	.87½	.37½	.17½	.41½	.70	.90	.90	1.00	1.10	1.20	(9)
Lost Soldier.....	1.35	1.05	.80	.60	-----	.90	1.00	1.10	1.20	1.30	1.40	1.50
Nutle Creek.....	1.90	1.65	1.40	1.20	-----	1.20	1.40	1.60	1.70	1.80	2.00	2.10
Osgo.....	1.0156	.9014	.6514	.4514	-----	.8014	.9014	1.0014	1.1014	1.2014	1.3014	1.4014
Pilot Butte.....	1.60	1.25	1.00	.80	-----	1.15	1.25	1.35	1.45	1.55	1.65	1.75
Rock Creek.....	.35	.35	.35	.35	-----	.35	.35	.35	.35	.35	.35	.35
Warm Springs.....	.35	.35	.35	.35	-----	.35	.35	.35	.35	.35	.35	.35
GASOLINE PRICES, CASPER ⁴												
Tank Wagon.....	.18	.22½	.22½	.20½	.20½	.14½	.14½	.14½	.15½	.15½	.16½	.16½
State Gas Tax.....	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Service Station Charge.....	.03	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
Service Station Price.....	.21	.24½	.24½	.22½	.22½	.16½	.16½	.16½	.17½	.17½	.18½	.18½
CHEYENNE												
Tank Wagon.....	.20	.24	.24	.23	.23	.17	.17	.17	.18	.18	.19	.19
State Gas Tax.....	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Service Station Charge.....	.03	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
Service Station Price.....	.23	.26	.26	.25	.25	.19	.19	.19	.20	.20	.21	.21

See footnotes at end of table.

Posted field prices for crude oil in fields shown, with dates effective—Continued

Field	1923										1924	
	Apr. 24	May 3	May 7	May 14	Jul. 31	Aug. 10	Sep. 21	Oct. 20	Nov. 9	Nov. 20	Jan. 10	Jan. 21
Salt Creek.....	\$1.55	\$1.45	\$1.35	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	\$1.00	\$1.20
Mid-Continent posted by Prairie Oil and Gas Co.?	1.90	1.80	1.70	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.40	1.60
Big Muddy.....	1.55	1.45	1.35	1.25	1.25	1.10	.75	.75	.45	.45	.85	1.10
Black Mountain.....												
Byron.....	2.00	1.90	1.80	1.70	1.70	1.70	1.50	1.50	1.10	1.10	1.55	1.70
Elk Basin.....	1.75	1.65	1.55	1.45	1.45	1.45	1.35	1.35	.95	.80	1.40	1.55
Ferris-G. P. Dome.....							1.10	1.10	.80	.80	1.20	1.40
Grass Creek.....												
Light.....	2.00	1.90	1.80	1.70	1.70	1.70	1.35	1.35	.95	.95	1.40	1.55
Heavy.....	2.00	1.90	1.80	1.70	1.70	1.70	1.35	1.35	.90	.90	1.40	1.55
Hamilton Dome.....	1.55	1.45	1.35	1.25	1.25	1.17½	1.35	1.35	.95	.95	1.40	1.55
Lander.....	(?)	(?)	(?)	(?)	(?)	(?)	.82½	.82½	.52½	.52½	.92½	1.15
Lance Creek.....	2.00	1.90	1.80	1.70	1.70	1.70	.70	.70	.70	.70	.70	.70
Lost Soldier.....	(?)	(?)	(?)	(?)	(?)	(?)	1.20	1.20	.80	.90	1.35	1.50
Mule Creek.....	1.25	1.15	1.05	.95	.95	.95	.67	.75	(?)	(?)	(?)	(?)
Notches.....							.75	.65	.45	.45	.70	.70
Osage.....	2.00	1.90	1.80	1.70	1.70	1.70	1.35	1.20	.80	.90	1.35	.65
Pilot Butte.....	1.3014	1.2014	1.1014	1.0014	.0014	.8514	.5014	.5014	.40	.40	.6014	.8514
Rock Creek.....	1.65	1.55	1.45	1.35	1.25	1.25	.90	.90	.60	.60	1.10	1.30
Torchlight.....	2.00	1.90	1.80	1.70	1.70	1.70	1.35	1.35	.95	.95	1.40	1.55
Warm Springs.....	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35	.35
GASOLINE PRICES, CASPER												
Tank Wagon (Less Tax).....	\$.19	\$.19	\$.19	\$.18	\$.18	\$.17	\$.13	\$.13	\$.13	\$.13	\$.16	\$.16
State Gas Tax.....	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01
Service Station charge.....	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
Service Station Price.....	\$.21	\$.21	\$.21	\$.20	\$.20	\$.20	\$.16	\$.16	\$.16	\$.16	\$.19	\$.19
CHEYENNE												
Tank Wagon (Less Tax).....	\$.21	\$.21	\$.21	\$.20	\$.20	\$.19	\$.14½	\$.15½	\$.14½	\$.14½	\$.17½	\$.17½
State Gas Tax.....	.00	.00	.00	.00	.00	.01	.01	.01	.01	.01	.01	.01
Service Station Charge.....	.02	.02	.02	.02	.02	.02	.02	.01	.02	.02	.02	.02
Service Station Price.....	\$.23	\$.23	\$.23	\$.22	\$.22	\$.22	\$.17½	\$.17½	\$.17½	\$.17½	\$.20½	\$.20½

Field	1924					1925						
	Feb. 4	Feb. 5	Mar. 10	Jul. 18	Jul. 29	Jul. 30	Sep. 19	Jan. 23	Jan. 31	Feb. 13	Feb. 18	Mar. 10
Salt Creek.....	\$1.45	\$1.45	\$1.60	\$1.35	\$1.10	-----	\$.85	\$1.10	\$1.30	\$1.55	\$1.60	\$1.60
Mid-Continent posted by Prairie Gas and Oil Co. ¹	1.85	1.85	2.00	1.75	1.50	-----	1.25	1.50	1.70	2.00	2.00	2.00
Big Muddy.....	1.10	1.35	1.50	1.25	1.10	1.00	-----	1.00	1.30	1.55	1.60	1.60
Black Mountain.....	1.25	1.25	1.25	1.25	1.25	1.25	-----	.85	.85	.85	.85	.85
Byron.....	1.70	1.95	2.10	1.80	1.55	-----	1.30	1.55	1.55	2.10	2.10	2.25
Elk Basin.....	1.55	1.80	1.95	1.70	1.45	-----	1.20	1.45	1.65	2.00	2.00	2.15
Ferris-G. P. Dome.....	1.40	1.65	1.80	1.55	1.30	-----	1.05	1.30	1.30	1.30	1.30	1.30
Grass Creek.....	1.55	1.80	1.95	1.70	1.45	-----	1.20	1.45	1.65	2.00	2.00	2.15
Light.....	.90	.90	.90	.90	.90	-----	.90	.90	.90	.90	.90	.90
Greybull.....	1.55	1.80	1.95	1.70	1.45	1.45	1.20	1.45	1.45	2.00	2.00	2.15
Hamilton Dome.....	1.15	1.40	1.55	1.30	1.10	1.05	1.80	1.05	1.05	1.55	1.60	1.80
Lander.....	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70	.85	.85
Lance Creek.....	1.50	1.75	1.90	1.65	1.50	1.40	1.15	1.40	1.60	1.95	1.95	2.15
Lost Soldier.....	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)	(⁶)
Mule Creek.....	.70	.95	1.10	.85	.70	.60	.60	1.00	1.25	1.25	1.25	1.50
Notches.....	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Osage.....	1.50	1.75	1.90	1.65	1.40	-----	1.15	1.40	1.60	1.95	1.95	2.15
Pilot Butte.....	.8514	1.1014	1.2514	1.0014	.8514	.7514	.5014	.7514	.7514	1.3014	1.3514	1.3514
Rock Creek.....	1.30	1.55	1.70	1.45	1.30	1.20	.95	1.20	1.40	1.65	1.70	2.00
Torchlight.....	1.55	1.80	1.95	1.70	1.45	-----	1.20	1.45	1.45	2.00	2.00	2.15
Warm Springs.....	.35	.35	.35	.35	.35	-----	.35	.35	.35	.35	.35	.35
GASOLINE PRICES, CASPER												
Tank Wagon (Less Tax).....	\$1.17	\$1.17	\$1.19	\$1.17	\$1.17	\$1.17	\$.14	\$.14	\$.14	\$.17	\$.19	\$.19
State Gas Tax.....	.01	.01	.01	.10	.01	.01	.01	.01	.01	.01	.01	.01
Service Station Charge.....	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
Service Station Price.....	.20	.20	.22	.20	.20	.20	.17	.17	.17	.20	.22	.22
CHEYENNE												
Tank Wagon (Less Tax).....	\$1.18½	\$1.18½	\$2.01½	\$1.18½	\$1.18½	\$1.18½	\$.15½	\$.15½	\$.15½	\$.18½	\$.20½	\$.20½
State Gas Tax.....	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
Service Station Charge.....	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
Service Station Price.....	\$.21½	\$.21½	\$.23½	\$.21½	\$.21½	\$.21½	\$.18½	\$.18½	\$.18½	\$.21½	\$.23½	\$.23½

¹No posted field price—basis of settlement for State's royalty oil.

²Gravity schedule of prices adopted and posted by Prairie Oil and Gas Company, Nov. 23, 1922; prices shown above subsequent to that date are for 38° gravity oil.

³Contract.

⁴First tank wagon prices for Rocky Mountain District were made under date of May 2, 1921; prior to that date, all quotations were for Chicago tank wagon prices.

⁵Contract F. O. B. Lander.

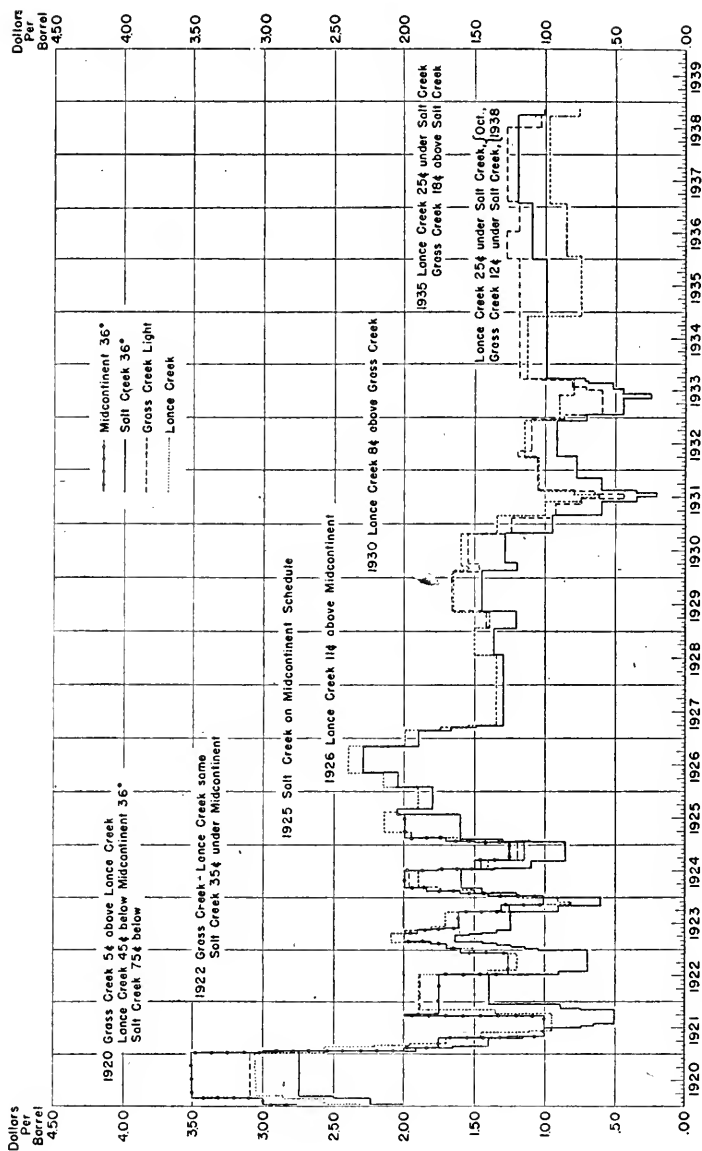
⁶Contract for entire field.

EXHIBIT No. 1298

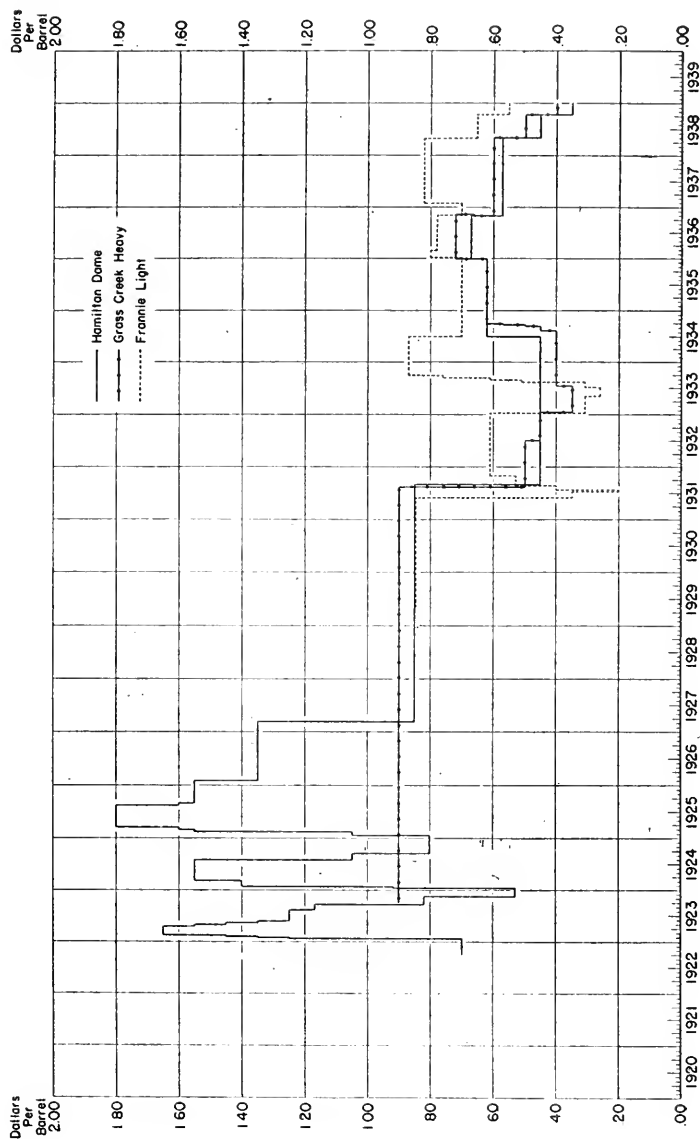
[Submitted by Pierre La Fétiche]

COMPARATIVE SCHEDULE

MIDCONTINENT AND WYOMING LIGHT OIL



COMPARATIVE SCHEDULE WYOMING BLACK OIL



"EXHIBIT No. 1299," introduced on p. 9427, is on file with the Committee

EXHIBIT No. 1300

UNITED STATES DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, March 22, 1939.

Hon. JOSEPH C. O'MAHONEY,
United States Senate.

MY DEAR SENATOR O'MAHONEY: In response to your telephone request, regarding accretions to the Reclamation Fund, and the present status of the fund, and the estimated status based upon appropriations proposed for the fiscal year 1940, as contained in H. R. 4852, the following data is furnished.

Enclosure No. 1 is a statement of accretions to the Reclamation Fund by States as of June 30, 1938. This table is published on page 59 of the Annual Report of the Secretary of the Interior for 1937.

Accretions to the fund from Naval oil royalties, pursuant to the Hayden-O'Mahoney amendment to the Interior Department Appropriation Act, fiscal year 1939, are not included in the tabulation. These accretions amounted to \$29,778,300.23, of which \$15,000,000 were applied to reimburse the Treasury for the loan made to the Reclamation Fund. To date the Treasury Department has not furnished the Department with a distribution of the amount by States.

Enclosure No. 2 attached is a statement of the annual transactions of the fund, actual for the fiscal years 1936, 1937, and 1938, and estimated transactions for the fiscal years 1939 and 1940. The unappropriated balance in the fund on June 30, 1939, is now estimated at \$11,577,000. For 1940, estimated accretions amount to \$3,570,000, and estimated collections amount to \$5,200,000, making in all an estimated total of \$20,347,000 available for appropriation. H. R. 4852, as passed by the House, will authorize the expenditure of approximately \$11,948,000. On the basis of these estimates, the unappropriated balance in the fund on June 30, 1940, would be approximately \$8,399,000.

Accretions and collections to the fund so far during the current fiscal year are exceeding the estimates stated on enclosure No. 2. For the period of July 1, 1938, to February 28, 1939, the income to the fund was as follows:

Public Land Sales.....	\$201, 455. 81
Naval oil royalties.....	29, 778, 300. 23
Other oil royalties.....	2, 153, 656. 87
Potassium royalties.....	19, 583. 87
Federal Power licenses.....	22, 323. 94
Total accretions.....	32, 175, 320. 72
Collections.....	3, 455, 101. 92
Total income.....	\$35, 630, 422. 64

The cash balance in the fund on March 1, 1939, was \$23,692,616. 96.

I trust that the information herein and attached is all that is desired.

Sincerely yours,

[s] E. K. BURLEW,
First Assistant Secretary and Budget Officer.

Enclosure 1946995.

RECLAMATION TABLE. — *Accretions to reclamation fund, by States*

States	Sale of public lands		Proceeds from Oil Leasing Act		Total to June 30, 1938
	Fiscal year 1938	To June 30, 1938	Fiscal year 1938	To June 30, 1938	
Alabama			\$3,426.09	\$185,410.55	\$185,410.55
Arizona	\$18,828.66	\$2,705,327.41		160.20	2,705,487.61
California	19,413.69	8,205,050.33	1,733,822.78	15,822,947.08	24,027,997.41
Colorado	10,079.30	10,283,302.96	71,196.79	707,202.22	10,990,505.18
Idaho	8,155.26	7,018,923.38	1,388.29	20,776.52	7,039,699.90
Kansas	109.13	1,033,176.73	21.00	21.00	1,033,197.73
Louisiana			122,792.63	196,054.29	196,054.29
Mississippi			11.55	11.55	11.55
Montana	16,258.75	15,359,087.09	59,633.39	1,255,754.99	16,614,842.08
Nebraska	122.56	2,094,431.14			2,094,431.14
Nevada	3,166.58	1,026,246.65	84.00	5,531.37	1,031,778.05
New Mexico	20,890.82	6,682,433.77	370,360.71	3,354,592.13	8,037,025.90
North Dakota	552.89	12,219,211.66	16,497.76	169,219.54	12,388,431.20
Oklahoma	141.52	5,929,544.58			5,929,544.58
Oregon	8,502.90	11,980,933.16	176.54	186.82	11,981,019.98
South Dakota	1,796.12	7,733,413.02	294.70	2,143.96	7,735,556.98
Utah	9,976.23	4,249,278.82	83,418.97	617,145.33	4,866,424.15
Washington	3,806.89	7,450,872.68		33,749.63	7,484,622.31
Wyoming	20,875.14	8,665,490.94	890,681.62	35,264,961.81	43,930,452.75
Total	142,676.44	112,636,624.35	3,353,866.82	55,635,868.99	168,272,493.34
Proceeds, Federal water power licenses					¹ 780,266.97
Proceeds, potassium royalties and rentals					² 410,955.26
Grand total					169,463,715.57

¹ Proceeds for fiscal year, \$20,533.60.² Proceeds for fiscal year, \$82,601.47.*The reclamation fund, 1936-40*

	Actual, fiscal year 1936	Actual, fiscal year 1937	Actual, fiscal year 1938	Estimate, fiscal year 1939	Estimate, fiscal year 1940
Accretions to fund:					
Public land sales	\$154,568	\$127,176	\$142,676	\$125,000	\$125,000
Oil leasing rentals and royalties	2,053,153	3,093,537	3,353,867	3,375,000	3,350,000
Oil leasing—Naval Petroleum Reserves				29,730,000	
Potassium royalties and rentals	79,874	67,122	82,601	75,000	75,000
Federal power licenses	86,831	19,400	20,534	20,000	20,000
Income from accretions	2,374,426	3,307,235	3,599,678	33,325,000	3,570,000
Repayment income:					
Construction charge collections	169,494	634,100	1,866,169	2,000,000	2,500,000
Operation and maintenance collections	949,027	1,094,028	1,219,205	1,200,000	1,200,000
All other collections	1,345,264	1,267,520	1,477,872	1,500,000	1,500,000
Income from collections	2,463,785	2,995,648	4,563,246	4,700,000	5,200,000
Total income, all sources	4,838,211	6,302,883	8,162,924	38,025,000	8,770,000
Balance in fund beginning of fiscal year	7,683,225	10,999,261	14,014,115	12,952,000	11,577,000
Total available	12,521,436	17,302,144	22,177,039	50,977,000	20,347,000
Cash withdrawals:					
Disbursements	1,522,175	3,288,029	9,224,714		
Repayment on bond loan				15,000,000	
Authorized expenditures				24,400,000	
Estimate of appropriation, 1940					11,948,000
Balance in fund end of fiscal year	10,999,261	14,014,115	12,952,326	11,577,000	8,399,000

EXHIBIT No. 1301

[Original document from files of National Association of Petroleum Retailers, Inc.]

26 BROADWAY,
New York, November 16, 1936.

C. E. ARNOTT.

Mr. WILMER R. SCHUH,
National Association of Petroleum Retailers, Inc.
Republican Hotel, Milwaukee, Wisconsin.

DEAR MR. SCHUH: The attached is rather unfortunate. I am wondering why this particular publication cannot be more constructive. Frequently, it is violent in its accusations against most everyone in the industry.

Yours very truly,

C. E. ARNOTT.

CEA:LS.

[The Pump Handle, published by the Master Gasoline Operators' Association, Inc., 3576 W. 25th Street, Gust C. Linsenmann, editor. SHadyside 4594. Vol. 1. Cleveland, Ohio, November 1, 1936. No.10]

ATTENTION NATIONAL CARBON CO.

It has come to our attention that car dealers are selling Prestone to truck and fleet owners at 25% discount. Also that Nela Park supplies their employees with Prestone at \$2.30 per gallon.

We cannot control the policy of the National Carbon Co., but we want to say this,—If this practice continues—Independent dealers of Cuyahoga County will not stock, service or test Prestone or do anything to promote the sale of it. However, we will take no action for 30 days in the hope that this will be cleaned up.

IOWA PLAN EXPOSED

You have heard much about the Iowa plan or the "New Retail Dealers Plan" as some prefer to call it. Gentlemen, the Iowa plan is not what it is cracked up to be. It is supposed to mean the withdrawal of the oil companies from retail operation, from the control of retail prices of gasoline, etc. Dealers from Iowa, Michigan and Illinois will bear us out when we say flatly—"bunk."

Like the man from New York in the brown derby would say, "Let's look at the record." Usually the Iowa plan was initiated with the retail price of gas 3½ cents higher than the tank wagon price. Then—here's the nigger in the wood pile, boys—when the tank wagon price goes down, a large announcement goes into all the local newspapers telling the public that the tank car price of gas has gone down (or up) and "it is expected that the retailers will pass this on to the consumer." What chance has the retailer got to establish a fair margin in the face of this? It must be remembered that all the lessee operators are operating under short term leases, that the slightest violation gives their supplier the right to cancel and put another operator in. In the face of this do you think they have relinquished control?

Dealers in "Iowa Plan" territories tell us that chiseling, discounting, etc., runs wild as soon as the plan goes into operation.

Of course all this time the companies still get their full tank wagon price for gas. They won't have to pay chain store taxes, they can tell investigators from the Federal Trade Commission that they have no control over their retailers and are not responsible for differences in prices, margins, etc. Do you get the picture? The Iowa plan is simply an evasion of taxes and responsibility under the Robinson-Patman bill. It may go into effect in Cleveland. In fact it already has without any announcements by Sinclair, Sun and a few more companies. But—don't be fooled by it.

We will say this—that when all company stations are leased and the plan is in operation here that this district will have plans set up in cooperation with lessee operators that will give dealers "actual" control of their retail prices. The oil companies know this—that is the reason no announcement has been made of the Iowa plan.

Nomination of officers, Tuesday, Nov. 10th. Time, 8 P. M. Place, Plasterers' Hall, 1651 E. 24th Street, Near Payne Ave.

Arnott.¹

[The Pump Handle, published by the Master Gasoline Operators' Association, Inc., 3576 W. 25th Street, Gust C. Linsenmann, editor., SHadyside 4594. Vol. 1 Cleveland, Ohio, January 1, 1937. No. 12]

AN OPEN LETTER TO THE STANDARD OIL CO. OF OHIO

STANDARD OIL CO. OF OHIO,
Cleveland, Ohio.

Attention of Mr. Stambaugh and Mr. Holliday.

GENTLEMEN: By reducing gasoline prices you have disrupted marketing conditions in the best gasoline market in the country. You have, by forcing dealers to meet your price, destroyed their chances of earning a decent living. Your price structure was not threatened in any way. Don't you believe a compromise could have been worked out that would have been satisfactory to all concerned, both companies and dealers? We suggest that a 19 cent or higher price is entirely justified by the advance in crude oil prices—leave tank wagon prices to your dealers at a 4 cent differential from the posted price. The dealers would be giving up half of what they wanted—you would be giving up half of what you wanted. We believe this is fair to all concerned and your prestige would be immeasurably increased, the bad price situation here would be cured. Instead of war you would have peace, instead of losses you would have profits.

Surely an effort toward peace in the present crisis should be given every consideration. The Master Gasoline Operators of Cleveland would welcome an early reply.

Yours very truly,

GUST. T. LINSENMANN,
President, Master Gasoline Operators Association, Inc.

STAMPS, PREMIUM DISHES AND DISCOUNTS

A lot of unfair abuse and criticism was heaped upon your ex-president for giving green stamps. These men (who tried their best to get stamps) expected him to be a martyr for his competitors—well he isn't, and won't be.

His only reply was that when a Cleveland organization is 80 per cent strong that there would be a chance to do something about it, that a minority of dealers could not control an unorganized majority. For the benefit of those not already informed the last act of your retiring president was to appoint Mr. Stecky as chairman of the Organization Committee. Within ten days Mr. Stecky will have 20 men in the field to organize every dealer in the county. The lack of organization is the only reason for the continuance of premiums. A handful of dealers voting to end premiums doesn't carry enough weight to make a dent in this practice. Neither does a howling 'unorganized' mob. But put the two together and the evils of marketing can be easily rubbed out. So, if you, Mr. Dealer, are really sincere in your demands to stop chiseling, have the "guts" to put your money on the line and help Mr. Stecky organize this town and county, or forever keep still.

Next meeting, members only, Tuesday, January 12th, 8 p. m. Board members 7:30 p. m., Plasterers' Hall, 1615 East 24th Street, Near Payne Ave.

EXHIBIT No. 1302

[From the files of the National Association of Petroleum Retailers]

Cc—Bostrom, Brewer.

Truck Discounts. Executive.

E. CHAT. SHANKS, EXECUTIVE DIVISION,
February 17th, 1937.

W. R. SCHUCH,
Hotel Raleigh, Washington, D. C.

Brewer has sent us information that official Sinclair signs are appearing around Chicago in the form of an upper and lower bar tangent to a circle. On the upper bar, it is stated "Just ahead on right" or "Just ahead on left". In the circle are the initials, "H. C.". On the lower bar is "We Cater to Trucks".

¹ In pencil on original.

On the back of the sign is the statement "Anyone found molesting this sign will be prosecuted to the fullest extent of the law," Jos. D. Ahern Co. While the sign does not say so, the intent is obvious, and the inference is that a discount is available to trucks. This is just one more offense on the part of Sinclair, and it is suggested that you take this up with Arnott and with Carnes, calling Carnes on long distance from Washington. It might even be advisable for you to go to New York and discuss this entire situation and with reference to the building activities of Sinclair. This company is going to have the dealers so down on it that it is certain the company is going to suffer severely, if they don't correct some of the bad practices which they are instituting today. Certainly, Sinclair is offsetting all of the good work which is being done by the NAPR and by such leaders as Arnott.

ECS:P.

EXHIBIT No. 1303

[From the files of the National Association of Petroleum Retailers]

SEPT. 26, 1939.

Mr. J. R. CONNERY,
4902 Washington Avenue, Houston, Texas.

DEAR CON: I promised you in Des Moines that you would get so much mail from the NAPR office that it would make your head swim. This is the first shot from me but I think it will prove to you that we are already on the job and hitting the ball and we are not wasting a minute in our effort to go to town on our 1940 convention down there in Houston.

The first thing we have done is to send a copy of the enclosed letter to each of the writers of the letters which were so nicely bound in that Convention booster you brought from Houston. We have figured out a story for you and your buddies to tell to those fine oil companies and we believe that we have a right to be proud of this method of securing help for our Convention because we feel, and I know that you do too, that we have something of definite value to offer to them for their money instead of just accepting a contribution as an outright gift. Our service station manual, as you know, is not a method for extracting money under false pretenses but is a legitimate method of giving something of equal value for money expended by the oil companies.

We have already sold approximately twenty-five thousand manuals to oil companies in the Middle West.

Presentation copies of our manual have been mailed to the writers of those letters and I have no doubt but what if you and Calver, Colley and Moore would go to them and lay your story before them in plain English that they would recognize the fact that in these manuals lies a legitimate means of helping us to make our 1940 Convention in Houston an outstanding one from the viewpoint of all phases of the petroleum industry.

Incidentally, you might keep an ear tuned to some Southwestern official of some company down there who would grant us enough of his time to tell us something about the Texas operations as a featured speaker on our convention program.

I know already that you will do a good job on this, Con, and I'll be waiting to hear how thing turn out. Write me anytime you get the urge and tell me how you are doing.

Sincerely yours,

NATIONAL ASSOCIATION OF PETROLEUM RETAILERS,
CARL G. HODGES, *Executive Vice President.*

CCH:L.

EXHIBIT No. 1304

[From the files of the National Association of Petroleum Retailers]

TUESDAY, 6-10-36.

Mr. WILMER R. SCHUH,
President, National Association of Petroleum Retailers,
LaSalle Hotel, Chicago, Illinois.

DEAR BILL: There is no definite news for you regarding the meetings here as had been hoped. I have been working upon this proposition yesterday and today although yesterday was practically a loss due to having to wait for Inness Brown in connection with the budget and other matters. However, there are a few things which I can give you relative to the work which we are doing and in connection with our board.

As the situation stands at the present time, we are sure of 420 tickets. You will recall that Sun said no and did Tidewater and I am putting off seeing them until the last in the hope that I can change their mind. I cannot get a definite answer from American until next Tuesday and the same applies to Conoco. My guess is that American will say no and Conoco is a fifty-fifty chance. Richfield said no today but the door has been kept open and it is possible that they may change their mind by Friday. The tough ones are left and are the Jersey Company, Cities Service (Warner-Quinlan), and those mentioned above. Companies who are in are: Texas, Socony, Gulf, Shell, and Pure. Gulf took the magnificent number of twenty tickets, netting us just three times the cost of the telephone call to Pittsburgh.

Tomorrow morning I am going to try to crack Cities Service and the Jersey Company and expect to go back to Tidewater in the afternoon. It seems to me that the situation hangs upon what I get from these three companies and I am not at all hopeful of success.

Brown feels that we must have some sort of a code meeting in NYC and that if this plan does not work, it must be developed in some other way. He feels also that the board meeting here is extremely essential. I think that we both agree with him as to the importance of these meetings but how it is to be done is certainly a mystery. I will advise you by telegraph not later than three o'clock tomorrow afternoon as to the results obtained, up to that time.

Yesterday Inness Brown and I went over this plan upon which we are working and we are very much in agreement as to the development of the budget. It is going to be necessary to trim down the size of it somewhat and to give it a detailed tabulated form upon regular accounting paper with a summary which will show only the amounts allowed to the various departmental functions. The information has not yet been received from Washington and, if it does not arrive in tomorrow morning's mail, I will endeavor to secure the desired information here or get in touch with Washington. We believe that this budget should be ready for the meetings proposed in Chicago as noted below. I understand that Inness has a meeting with Arnott for tomorrow.

I had a nice visit with Arnott Monday afternoon after you left in which we discussed a number of phases of the current situation and in which I gave him information he desired relative to the Kentucky Jobbers' group and the Master Association of Cleveland. Arnott was much interested in the proposed board meeting here and asked many questions relative to the number of eastern directors we had and similar subjects. He stated that if we wanted to bring six or seven of our eastern directors to Chicago at the time of the standing committee there, he would be able to see that their transportation was paid and he wanted all of our directors who were at the meeting to be his guests at a luncheon to which he would also invite a number of refiners. In thinking this matter over after leaving Mr. Arnott, it was not clear to me whether he meant he would pay transportation by any means or whether he meant that he would pay transportation under an arrangement similar to that by which we propose to bring our western directors to the eastern meeting; that is four or five in an automobile. Brown is of the opinion that he meant by any method of transportation and that all we would need to do would be to present our bill and Brown asked me also if he might be included in the luncheon. I assured him that he could. I am to see Arnott upon this further toward the end of the week, probably Friday, and suggest that you communicate the reaction of those at your meeting to me upon this point.

Of course it will occur to you that if we cannot hold the board meeting in the East it might be possible to hold it in Chicago with the help of Arnott, bringing our eastern directors to Chicago. This would not be nearly as beneficial but we might have to take it.

Arnott advised me that the meeting at Washington has been arranged with Hadlick for the 17th and suggests that you telephone him at the Washington Hotel or at the Shoreham Hotel about ten o'clock on the morning of the 17th. He states that the time of the appointment with Hadlick is not definite and he will not know until he arrives in Washington.

Mr. Arnott also advised that the indications were that the meeting of the standing committee in Chicago would be upon the 23rd and might continue over into the 24th. He said that this fitted into the plans of some of the western men better than the 24th and 25th.

At the office of Jack Carnes this morning I was informed that you might be able to contact him in Chicago by getting in touch with Mr. Sus. It is impossible to do anything with Sinclair without taking the matter up with Carnes.

As you can understand I am in a complete quandry as to what to do about the entire matter. 420 tickets will not provide an aedquate meeting nor will it provide the expenses of our directors to NYC. I was much surprised at the attitude taken by Conoco, upon whom we had counted, and had difficulty in getting to Battson upon the subject because when I arrived there it had been definitely turned down. After considerable maneuvering I did get into Battson's office late this afternoon and after getting there he remembered me and said that he had me confused previously with another person. However, they have adopted a definite policy to not contribute to any more dealer meetings and this policy is controlled from Ponca City. I suggested that I might get in touch with Harry Kennedy and Battson told me that Kennedy was the only person who could put it over but that he would first ask the opinion of Battson upon the subject. It happens that Kennedy is now somewhere in Montana upon an exploring trip and will not return to Ponca City until the 17th, when Battson will meet him at noon and has promised that he will take up the subjeet with Harry and wire me immediately yes or no.

What the hell did we think of this dam plan for anyway?

I have come to the conclusion that one of the things which we are up against is that the companies have been called upon by the dealers in this territory continuously for contribution and meeting expenses that they have about decided to call a halt to the whole thing and we have jumped into the stone wall which they have erected to stop it. That is our hard luck and how to break down the wall is a mystery.

I received a letter today from the laboratory, following up the telegram received yesterday, in which it is stated that because of a restriction of funds for the work, I need not expect to return to the laboratory after completing the work which I am doing. This makes it imperative that something must be done immediately to support our office properly or I will be forced to look for other work which would probably prevent me from carrying on with the National Association of Petroleum Retailers as I have in the past. Whether there is such actual restriction or not is rather pointless in that the leave which I have taken and the extension of leave requested have brought about this reply. If I had remained upon the job I probably would have been retained whether the funds were restricted or not.

We have received a letter from Al Robertson, Kenosha, relative to his desire to hold a stabilization dinner at Kenosha at which you are to be the speaker. It is suggested that you stop in Kenosha on your return home and make what arrangements you can and it is suggested also that the 25th might be a very good date for the meeting as coming between the standing committee meeting at Chicago and the resumption of the codecy.

Of course all this means that I will be able to continue with you upon the southwestern trip until the present work is ended upon the code.

Yours sincerely,

NATIONAL ASSOCIATION OF PETROLEUM RETAILERS,
E. CHAT. SHANKS, *Exec-Secty.*

EXHIBIT No. 1305

From the files of the National Association of Petroleum Retailers]

EXECUTIVE OFFICES,
Aug. 29th, 1936.
Dict. 8-25-36.

Mr. HARRY J. KENNEDY,
*Vice-President, Continental Oil Company,
Ponca City, Okla.*

DEAR HARRY: Many. many thanks for the co-operation which you are giving us in connection with association work, particularly in Region Five. Your letter of August 13th to all division managers is certainly the right type of co-operation and shows an understanding of the situation that is most encouoraging to us. Some who received a letter did not appear to understand the purpose although others apparently went to work, just as you have done

Enclosed is a copy of a letter to Mr. D. J. Moran, relative to addressing the fourth national convention. It is realized that Mr. Moran is a very busy individual and probably one who is difficult to secure for such an engagement. However, it is hoped that you will lend your influence and that we will be able to secure his acceptance.

Trusting that you will return from your vacation completely rested and ready for the many jobs confronting you, we are

Yours sincerely,

NATIONAL ASSOCIATION OF PETROLEUM RETAILERS,
E. CHAT. SHANKS, *Exec-Sec'y.*

ECS:k.

Enclosures.

Copies to: Schuh-Shaw.

HARRY J. KENNEDY,
Vice President.

File: 002. HJK

CONTINENTAL OIL COMPANY,
Ponca City, Oklahoma, August 13, 1936.

Mr. E. CHAT. SHANKS,
*Executive Secretary, National Association of Petroleum Retailers,
Room 251, Republican Hotel, Milwaukee, Wisconsin.*

DEAR CHAT.: All our division managers were sent letters of which the attached is a copy. Copies also went to our four regional sales managers. Accompanying each of those letters was a photostatic reproduction of your letter of August 3.

I hope that this may assist you in doing the constructive job at which your organization aims.

Yours very truly,

HARRY J. KENNEDY.

S
enc 1.

PONCA CITY, OKLAHOMA, *August 13, 1936.*

File: 002. HJK

To: Mr. J. P. Anthony, Albuquerque, New Mexico.

Mr. J. T. Strong, Butte, Montana.

Mr. Geo. J. Woods, Chicago, Illinois.

Mr. W. B. Elliott, Denver, Colorado.

Mr. P. W. Riggins, Ft. Worth, Texas.

Mr. J. S. Curtis, Kansas City, Missouri.

Mr. W. F. Hird, Lincoln, Nebraska.

Mr. T. B. Swennes, New York, N. Y.

Mr. J. G. Davis, Ponca City, Oklahoma.

Mr. W. A. Stokely, Richmond, Virginia.

Mr. P. M. Hirth, Salt Lake City, Utah.

Subject: Encouraging the right type of dealer organizations.

The attached reproduction of a letter refers to dealer organizations which experience has showed will in some form inevitably spring up following installation of the so-called "Iowa Plan" in any territory.

Because we anticipate the extension of the "Iowa Plan" to all marketing territories before the end of this year, it is vital that our division management personnel know which course we prefer to pursue when these dealer organizations questions arise.

We very much favor the organization of one sound, strong, and broadly representative dealer association in each market rather than a whole series of small dealer groups with competitive and conflicting programs. Experience has abundantly demonstrated the constructive value of the soundly organized and properly led influential dealer associations in territories where market makers have ceased posting retail markets.

Experience has also showed that when the leadership of Messrs. Schuh and Shanks of the NAPR, and the various regional officers and directors of their association, has been heeded, only constructive results have followed. We desire to give these men any assistance we can in encouraging the right kind of organization.

Hence we do not favor organization in any community of separate Conoco groups of dealers or lessees. We should much prefer to see the retail dealers in Conoco products become members of larger and more general groups where more united fronts can be built up under the leadership of dealers who are sound merchants and seasoned business men. Smaller groups, with their many individual purposes, multiply the difficulties of broad constructive action, and they represent easier prey for abortive forces who thrive on conflict.

Accordingly, whenever the opportunity offers, our division people should be direct and prompt in their recommendations to our dealers to organize along the lines urged by the NAPR, and not along the lines of groups handling single brands.

HARRY J. KENNEDY.

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OBL, EFB, THL, JAL, LTC, PJR, FLH.

bc: Mr. E. Chat. Shanks,
NAPR—Milwaukee, Wis.

HARRY J. KENNEDY,
Vice President.

CONTINENTAL OIL COMPANY,
Ponca City, Oklahoma, August 11, 1936.
File: HJK.

Mr. E. CHAT. SHANKS,
*Executive Secretary, National Association Petroleum Retailers,
Room 251, Republican Hotel, Milwaukee, Wisconsin.*

DEAR CHAT: We shall be more than glad to assist you in any phase of organizing dealer units in the old region five. I have taken up with J. A. Lentz, our western sales manager, the question of his consulting with other oil men in Denver on the selection of two suitable candidates to be offered to you for submission to your September convention by your nominations committee.

I have explained to Mr. Lentz what you conveyed to me in your letter as to the character, capacity and responsibility of the men who may be proposed; and I've also advised him how essential it is that any men proposed must be fully informed and have expressed a willingness before their names go in.

Because NAPR and dealer organization generally has never been advanced as far in region five as it has in some other territories. it strikes me that there may be more ignorance in Denver than you anticipate as to the significance of this movement. Consequently, Joe Lentz and the other men in responsible positions with major companies in Denver may have more difficulty than we anticipate in finding two dealers of the right kind who know enough about this movement to be willing to get into it and give it their time and loyalty.

Therefore, I have suggested to Joe Lentz that if their developing of these two candidates encounters any difficulties which could be alleviated by the assistance of some man from your headquarters, Joe Lentz is to wire you or phone you direct to present such a request. I have suggested that he go to you direct, because I am leaving town the end of this week and will be gone until the first of September. Otherwise I would be very glad to keep a finger on this and help you work it out to a conclusion.

I've taken it for granted that you or Bill Schuh, Fred Brewer, "Wally" Boutin or John Bunce could scoot out to Denver to lend a hand on this thing if any snags are encountered.

We are all aware of how difficult it usually is to get the best men to take an active part in matters of this kind. I'm so anxious to see the right kind of leadership from the very outset in the Rocky Mountain States that I would count on one of you fellows being willing to help persuade the right man if Joe Lentz and the other local people in Denver don't seem to be able to do it by themselves.

In my letter to Joe Lentz I've told him that I would advise you to expect a wire or phone call from him if they think they need your help.

Yours very sincerely,

HARRY J. KENNEDY.

B.

I'm going into action on the matter of local lessee organizations, also, and will cover that in a separate letter.

H. J. K.

EXHIBIT No. 1306

[Prepared by the Committee staff from records produced by National Association of Petroleum Retailers]

Books purchased from National Association of Petroleum Retailers by major oil companies

	<i>Total books sold to major oil companies</i>	
Arkansas Fuel Co.....	200	
Cities Service Oil Co.....	800	
		1, 000
Barnsdall Refining Co.....	1 800	800
Continental Oil Company.....	2, 420	2, 420
Socony-Vacuum Oil Co., Inc.....	4, 913	
Wadhams Oil Co.....	800	
General Petroleum Co.....	10	
		5, 723
Standard Oil Co., Ind.....	1, 000	
Utah Oil Refining Co.....	12	1, 012
Pure Oil Company.....	2, 800	2, 800
Shell Petroleum Corp.....	4, 007	4, 007
Sinclair Refining Co.....	2, 000	2, 000
Standard Oil Co., N. J.....	764	
Colonial Beacon Oil Co.....	1	
		765
Standard Oil Co. (Cal.).....	502	502
Standard Oil Co. (Ohio).....	1, 600	1, 600
The Texas Company.....	2, 000	2, 000
Tide Water Associated Oil.....	71	71
Atlantic Refining Co.....	10	10
Phillips Petroleum Co.....	166	166
Mid-Continent Petroleum Corp.....	500	500
Skelly Oil Co.....	500	500
Sun Oil Co.....	200	200
Total.....		26, 076

¹ In a letter, dated March 3, 1940, accompanying corrections in his testimony, Mr. Schuh states:

"On page 70 VV, 'Exhibit No. 1306,' I am sure that Barnsdall Refining Co. bought only 400 manuals, and not 800 manuals, as listed. I cannot certify as to the correctness of the other figures listed because I do not have the figures available at present, however you can correct the Barnsdall figures."

EXHIBIT No. 1307

[From the files of the National Association of Petroleum Retailers]

R. T. HASLAM.

26 BROADWAY,
New York, March 25, 1937.

Mr. WILMER R. SCHUH,
President, National Association of Petroleum Retailers,
Room 251, Republican Hotel, Milwaukee, Wisconsin.

DEAR MR. SCHUH: Mr. Teagle has sent us your letter of March 2nd discussing the market situation in New York and requested that we reply.

We feel sure there is no marketer of petroleum products in the eastern part of the United States who through the years has devoted more effort than this Company to maintaining price parity between its several similarly situated companies. We continue to believe such price parity should be maintained. We are relatively a newcomer in the New York market. A newcomer in a market must be competitive to maintain any position. While we must be competitive, we continue to hope for the arrival of the time when we and our competitors will be able to maintain price parity to similarly situated customers.

We think we have detected quite recently a tendency to refrain from creating more price preferences, and perhaps even some tendency toward the elimination of existing price preferences. Thus we are led to hope there will be material improvement in the market situation.

Very truly yours,

R. T. HASLAM.

RTH.G

EXHIBIT No. 1308

[From the files of the National Association of Petroleum Retailers]

MARCH 2, 1937.

MR. WALTER TEAGLE,
Standard Oil of N. J., New York City.

DEAR SIR: Your attention is requested to the enclosed copy of a report to me concerning the market situation in New York. Although the report is self-explanatory, it seems in order to add that the situation of unrest is probably more critical than realized.

It is believed that you will agree with us that a complaint to the Federal Trade Commission at this time would be disastrous and that it should be avoided. The number of persons concerned is so small that immediate action by those involved to eliminate cause for complaint should be a simple matter.

The leaders who have appealed to our office are trying to do a real job along constructive lines and deserve all the co-operation that can be given. They are "on the spot" and national leaders may find themselves in similar position if the complaint of the retailers is continued.

I have observed this condition at first hand during recent visits to New York and have conferred with the leaders there upon it, advising them to keep the retailers in line until something could be done. Consequently I know that there is truth in the report and if you have information upon this subject, your advice will be appreciated.

Yours sincerely,

NATIONAL ASSOCIATION OF PETROLEUM RETAILERS.
WILMER R. SCHUH, *President.*

"EXHIBIT No. 1309" appears in Hearings, Part 16, appendix, p. 9368.

EXHIBIT No. 1310

DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

ENGINEERING ASPECTS OF WASTE AND CONSERVATION IN THE PETROLEUM INDUSTRY

By R. A. Cattell, chief engineer, Petroleum and Natural Gas Division, Bureau of Mines

INTRODUCTION

Conservation is a word that brings forth diverse views. The word means different things to different men. However, few will disagree with the statement of Joseph A. Holmes, the first Director of the Bureau of Mines, that conservation is a "wiser and more efficient use of natural resources." Any discussion of conservation, involves a discussion of waste, for although these words are not exact antonyms, the apt statement has been made that "the antidote to waste is conservation." It has also been well said that "What is apparently conservation in some cases is, in fact, profligate waste in others, and vice versa."

Conceptions of waste change with time. In the early days of the industry destruction of oil by fire or spillage on the ground and down the creeks were substantially the only wastes recognized. In fact in the days of barging on Oil Creek when kerosene was the desired product, destruction of the gasoline fraction of the oil was not looked upon as waste. In those days little was known about underground wastes and virtually no attention was given to them. However their importance gained recognition with passage of time, and in 1921 thought concerning them was stimulated by a Bureau of Mines bulletin on Underground Conditions in Oil Fields. As domestic and industrial use of natural gas developed, waste of gas was looked upon as a regrettable loss of valuable fuel, but full realization that waste of natural gas results in loss of the agency for moving oil through the productive stratum and up the well came in relatively recent years, especially after publication in 1929 of a treatise on the Function of Natural Gas in the Production of Oil prepared in the Bureau of Mines.

Now two sources of physical waste are well recognized—above ground, or visible, and below ground, or invisible—and it is recognized that in either of the above categories waste (useless transformations) of energy may be more important and represent a greater monetary loss than actual waste of the marketable substance. All who accept Doctor Holmes' definition of conservation will desire to minimize the quantity of oil to be left under ground, beyond recovery by economical means, just as they will desire to avoid needless blowing of natural gas to the air, loss of oil by evaporation and accidental fires, or any other useless expenditure of assets. Those who hold to such principles also will desire to prevent waste of reservoir energy.

CONSERVATION OF RESERVOIR ENERGY

Probably the most significant trend of thought in oil and gas production is this growing realization that a producing structure is to be looked upon not only as a reservoir of oil and gas, but also as a reservoir of energy. Such energy, if properly conserved and used, will move the hydrocarbon fluids to the well and through it to the surface, delaying the time when energy must be supplied from external sources through gas or air injection, artificial water drive, the pump, or other means. It is well recognized now that effective use of the energy available from a natural petroleum reservoir will decrease the ultimate cost of recovery and increase the quantity of hydrocarbons that can be produced economically from the deposit. All who are aware of the fluid-energy attributes of a reservoir understand that dissipation of energy that could have performed effective work in bringing oil from the formation to the well, and thence to the surface, is contrary to efficient operation.

In general, any action which reduces pressure within a reservoir causes a decrease in the energy useful for moving and lifting the fluid. Reduction of pressure may result from removal of water as well as from removal of oil and gas. Also a considerable decrease in usefulness of the energy may result from a change in the location of a fluid, without any substantial decrease in its pressure. For example, a given quantity of natural gas that has moved from within an oil body on the flank of a structure to a position in a gas cap on its crest may have become much less useful for moving and lifting oil, although there may have been no substantial change in the pressure to which it is subjected.

FLUID-ENERGY RELATIONS IN SIMPLE ASPECT

To aid in developing a picture of the manner in which oil and gas are removed from the rocks and to point out the importance of relations of reservoir energy to movement of the fluids, which for convenience we have called fluid-energy relations, it may be helpful to quote the following from a chapter H. C. Fowler and I prepared for the Bureau of Mines Minerals Yearbook, 1934:

"In principle the fluid-energy relations of petroleum properties are relatively simple, but in detail they may be extremely complex. To reduce the concept to its simplest terms, consider an undrilled oil-bearing geologic structure of an ideal or "textbook" type. Its productive bed is a stratum of porous rock of substantially uniform texture, lying between two impervious strata, all arched into a dome. The strata are inclined downward, but with gradually decreasing slope, from the crest of the dome to its periphery where they are substantially horizontal. From the periphery outward the beds are inclined upward, and at some point the porous stratum crops out at the surface. Assume for this discussion that enough water has entered and is retained in the porous bed to fill its voids to the lowest point of the outcrop.

"From the outcrop down ward to the periphery of the dome and thence upward toward its crest to an oil-water contact the voids of the porous stratum are filled with water (generally salt water in the lower levels). Inward and upward from this oil-water contact the voids are filled with oil, which is lighter than water and therefore lies above it. This oil contains lighter hydrocarbons, of the range found in natural gas, in solution. This simple structure contains more of these lighter hydrocarbons than the oil will hold in solution at the existing pressure, so the porous stratum will not contain liquid in the higher central part of the dome. Instead, natural gas, which is much lighter than the oil, will occupy the voids of the porous bed above a gas-oil contact. Thus, the structure will contain a so-called "gas-cap."

"This reservoir, until punctured by the drill, may be considered, for all practical purposes, to be in a state of equilibrium. Gravity is acting on both

the rocks and the fluids. It is assumed, however, for present purposes, that the porous rock supports its overburden. Under that assumption, the impervious rocks confine the fluids, but the forces they exert against the porous bed are not sufficient to alter the size and shape of the voids in which the fluids are held.

"At any level in the water-filled part of the porous bed the fluid is under pressure equivalent to a head of water from the lowest point of the outcrop to that level (0.433 pound per square inch per foot of depth for fresh water), and at any level in the oil-filled part of the porous stratum the oil is under a pressure equal to that at the oil-water contact minus the pressure exerted by the head of oil from the level in question to that contact. Likewise, at any point in the gas cap the gas is under a pressure equal to that at the gas-oil contact minus the pressure due to the head of gas between that point and the gas-oil contact. In this connection, it is well to mention that although the pressure exerted by a column of gas is much less than that due to a column of liquid of the same height, it is not always negligible.

"It is apparent, therefore, that in such a virgin structure the forces are in balance. The water is pressing upward at the oil-water contact; but its pressure is counterbalanced by the pressure of the gas, acting at the gas-oil contact and transmitted through the oil, plus the pressure due to the head of oil between the two contacts.

"If a well is drilled into the oil-saturated part of the porous stratum and opened to a lower pressure, the forces are unbalanced. The oil surrounding the well, with lighter hydrocarbons in solution, starts to flow toward the point of lower pressure at the well bore. As the pressure on the oil is reduced some of the lighter hydrocarbons come out of solution, forming gas. This gas, in expanding toward the region of lower pressure, tends to push the fluid ahead of it toward the well, but some of the gas may bypass the oil and move into the gas cap, doing little or no useful work.

"When the fluid reaches the well it consists of a mixture of oil (still saturated with lighter hydrocarbons) and gas. If the pressure and other conditions are adequate the fluid moves up the well, the gaseous part tending to rise faster than the oil and to slip past it. As the fluid mixture reaches higher levels in the well, where the pressures are lower, more of the lighter hydrocarbons come out of solution joining the gas. Moreover, as this mixture rises and the pressure upon it decreases, the gaseous part expands, doing work on the fluid above it. Work of this nature is done at the expense of heat absorbed from the fluid or the surrounding formation.

"The more important sources of mechanical energy may now be considered. A given quantity of the fluid has potential energy (pressure head) measurable in terms of the product of its pressure and volume. The fluid also has ability to increase its volume with reduction in pressure, principally through release from solution and subsequent expansion of the lighter hydrocarbons, converting a part of its own heat energy or the heat energy of its surroundings, into mechanical work. The mechanical energy resulting from such expansion is not a fixed and definite quantity but depends upon the conditions under which the expansion takes place, particularly the opportunities for transfer of heat between the fluid and its surroundings and generation of heat within the fluid by friction or other effects.

"Important transformations of energy involved in the movement of the fluid mixtures from the reservoir to the surface may be listed as follows: (1) A definite amount of mechanical work must be done to lift the fluid through the vertical distance from its position in the formation to the surface; (2) the fluid must be accelerated from zero velocity at its original position in the formation to the velocity at which it leaves the well head; (3) the friction in the formation, in the flow tube, and in well-head connections must be overcome; and (4) the energy represented by the pressure head (pressure times volume) at which the fluid leaves the well must be supplied. In considering friction, account must be taken of the slippage of one fluid (gas) past another (oil), in addition to frictional effects that are analogous to resistance of porous media and pipes to the flow of homogeneous fluids.

"The objective in applying knowledge of fluid-energy relations is largely to move oil to the well and lift it to the surface, leaving a maximum of energy in the system available to do such work in the future. Each of the terms listed in taking stock of applicable energy and its expenditure, except the mechanical work represented by the lifting of the fluid against gravity from its original position in the sand to the surface, is subject to a measure of

control through design or method of operation. Hence it is evident that the problem is one in which man may use his knowledge and ingenuity to his benefit."

COMPLEXITIES OF FLUID-ENERGY RELATIONS

Quoting further from the above-mentioned chapter in the Bureau of Mines Minerals Yearbook, 1934:

In the foregoing the assumed conditions are simple and the treatment is qualitative rather than quantitative. Space does not permit detailed discussion of the ramifications of conditions that affect fluid-energy relations. However, the following illustrate the variety of factors to be considered.

1. Producing structures are not ordinarily as simple as the one assumed; in fact, most of them are complicated.

2. Oil-bearing beds are variable in their porosity (the measure of their capacity to hold fluid) and their permeability (the measure of their capacity to conduct fluid).

3. Water and sand may accompany the hydrocarbon fluids in their movements.

4. The relation of water, oil, and gas and their pressures is subject to a wide variety of conditions. As fluid is withdrawn from the oil-filled or gas-filled parts of the producing bed the oil-water contact tends to rise. The rate and regularity of its movement and the extent to which such encroachment will maintain pressure in the productive parts of the porous bed depend upon the manner and rate of withdrawal of fluids, the characteristics and uniformity of the producing stratum, and the opportunities for flow of water into the porous rock. If the gas cap is tapped and drawn upon for natural-gas production, the gas-oil contact may move up-dip. However, under some conditions the gas cap may expand and the gas-oil contact move down-dip. This movement is substantially uniform or irregular, depending upon the conditions in the reservoir system.

5. The natural gas associated with the oil in the structure, as distinct from that formed by evolution of lighter hydrocarbons from the oil, may aid materially in moving and lifting the fluids.

6. The lighter hydrocarbons in a structure may be insufficient to saturate the oil. For example, experimental work in the East Texas field showed that evolution of gas from solution did not start until the pressure on the oil was reduced to 755 pounds per square inch, although the reservoir pressure was 1,390 pounds per square inch when the tests were made and had been more than 1,600 pounds.

7. The flow of an oil-gas mixture in a well may be of several different types, with intermediate and transition forms. If the pressure is high enough, all the lighter hydrocarbon constituents are in solution, and the flow is that of a true liquid. If all the gas is not dissolved the oil-gas mixture may flow as a foam, the oil may be carried in the gas as a mist, slugs of oil and gas may alternate in the flow tube, or oil may be dragged up the walls of the flow tube in the form of a sleeve around a central column of gas. Differential movements of gas and oil are influenced greatly by the type of flow.

8. The release of gas from solution has harmful as well as helpful effects. As the gas is released the viscosity and surface tension of the oil are increased, rendering it more difficult to move through the sands. The bubbles of gas, by the so-called "Jamin effect", also may increase the resistance to flow. * * * As another factor, expansion of the gas, although resulting in mechanical work, may reduce the fluidity of the oil and cause deposition of wax by its cooling effect.

9. In general, the causes of pressure of the fluids and the sources of energy are not as free from complexity as was assumed in considering fluid-energy relations in their simplest aspect.

THE NEED FOR TECHNICAL KNOWLEDGE

The problems of oil and gas production are not limited to technology. They cut across the fields of economics, law, politics, and human relations. Some legal precedents that had their origin in ideas of the occurrence of oil and gas prevalent a half century ago and were based on economic situations greatly different from those of today have hampered the application of new scientific knowledge

as it became available. Moreover, much thought concerning oil and gas production has been based on inaccurate conceptions of physical phenomena; and legislative bodies, courts, and the public, have been insufficiently informed as to the natural laws upon which human action should be based.

To provide for wise development of the Nation's petroleum resources in the future, students of science and technology must supply the essential knowledge of natural laws. With a more adequate understanding of physical relations the technologist, economist, lawyer, statesman, and student of human relations may assist each other in solving problems as they arise. The special concern of engineers, chemists, geologists, and others whose chosen work deals with technical phases of the oil and gas industry is to gain knowledge of the physical relations that determine the behavior of oil and gas and to apply such learning toward efficient production and wise utilization of these fluid minerals.

TECHNICAL ADVANCE IN PETROLEUM AND NATURAL GAS PRODUCTION

Technical advance has been noteworthy in oil and gas production. Drake's well was 69 feet deep and was drilled with a derrick 35 feet high. Some derricks now in use are 5 times the height of the one Drake used, but a well has been drilled to 15,004 feet, or about 218 times the depth of Drake's well. In earlier years, operations were largely by "rule of thumb", but now the production of oil is conducted with the aid of the best engineering and geological advice and extensive laboratory facilities for both service and research.

Following the earliest period, as wells were drilled to greater depth and operating conditions became more difficult, engineers and geologists began to correlate underground formations from driller's logs, and by 1920 various kinds of cross sections, sub-surface-contour maps, and peg models in three dimensions were being used extensively in attempts to gain a better understanding of conditions underground. Now geologic logs made with the aid of micropaleontology have largely supplanted the logs based on information supplied by the drillers. As more wells were drilled by the rotary system, coring of formations developed and now various devices are used with rotary and cable tools to obtain samples of rocks in a condition as nearly as possible like that in which they existed before being disturbed. All ordinary cores, however, lose fluid through reduction in pressure as they are brought to the surface, so to provide more exact information concerning the rock and its fluid content in the formation, the Bureau of Mines and the American Petroleum Institute are cooperating in development of a core barrel that will cut and enclose a sample at the bottom of the well and bring it to the surface without loss of pressure or fluid.

If time permitted, the improvements in petroleum technology, aided by advances in metallurgy and other engineering fields, might be illustrated by discussions of various developments such as electrical logging in which information about the strata is obtained from electrical instruments; gun perforating, which permits penetration of casing extending through a producing stratum with steel bullets propelled by high explosives; methods of testing formations through the drill stem which are faster and more economical than the older methods and involve less hazard that a high-pressure well may get out of control; the chemical treatment of mud fluids to adapt them to the wide variety of conditions met in drilling, especially in areas where pressures are high and the formations tend to "heave" into the hole; treatment of wells with acid to increase their production; the improvements in drilling bits, drill pipe, and casing that have resulted from advancements in metallurgy; the various devices used for controlling and completing wells; and the methods used for cementing casing which permit placing several thousand sacks of cement in the annular space around a string of casing when such quantities are needed. Discussions of the methods used for maintaining pressures in fields by reintroduction of gas into formations, restoration of pressure in a similar way to rejuvenate fields that have been depleted by ordinary methods, and the practice of water flooding to increase the recovery as developed in the Bradford, Pennsylvania, field and extended to other areas, also would reveal much of interest.

On the whole, the petroleum and natural-gas industries have improved their practices through the application of technical knowledge, and many wastes that were common a few years ago have been minimized. The improvements in both efficiency and conservation are the result, in a large measure, of technical research and education.

INFLUENCE OF RESEARCH

Research and improvements in practice have had a marked effect not only in reducing surface waste and underground wastes such as losses of oil and gas to barren sands, but also in reducing the quantity of oil left in original reservoir-strata when fields are abandoned. On this point, I quote the following from a paper prepared by the Bureau of Mines for the Third World Power Conference in 1936:

Although it is easy to show that past production practices have been wasteful and innumerable examples may be cited where inexcusable waste has occurred, almost without reservation the tendency of oil-producing methods in use today is to recover an increasing proportion of the oil contained originally in the reservoir formations. The progress that has been made is exemplified in the gradually decreasing percentage of oil left in the reservoir when wells are abandoned because oil can no longer be produced at profitable rates. Lewis, in 1915, made an exhaustive study of early oil-recovery efficiencies in the Pennsylvania fields and found that 80 to 90 percent of the oil originally in the sands was left when the wells were abandoned. Steidle, in a recent study of unrecovered oil in Pennsylvania, verified the earlier estimates. If early production practices had been in accord with present-day methods, based on increased understanding of fluid-energy relations in reservoir sands, it is likely that secondary recovery methods such as are in use today would be far less profitable. Recoveries from the Bradford sand in Pennsylvania indicate that the total percentage of oil recovered by initial and secondary methods will just about equal the percentage recovery made in other fields where today's standard of efficiency is in effect.

Approximately one-half of the total oil that has been produced in the United States was taken from the reservoirs prior to 1926, and although many of the fields developed more than 10 years ago are still being produced, over-all recovery efficiencies in them will be low because their flush production was obtained under conditions which today would be classed as inefficient. During the succeeding 10 years, January 1, 1926, to January 1, 1936, 8,923,526,000 barrels of oil were produced in the United States—254,000,000 barrels more than during the preceding 66 years. With all that is known today of the benefits of producing oil with low gas-oil ratios, controlling edge-water encroachment, pressure maintenance, and the mechanics of flow in reservoir formations, a person is justified in believing that the last 8.9 billion barrels of oil were produced more efficiently than the first 8.6 billion barrels. On that assumption, which seems reasonably correct, the percentage of oil that will be left unrecovered in the newer fields probably will be of the order of 55 or 60 percent.

In certain areas, unfortunately too few in number, recoveries in excess of 40 percent are anticipated. In the Sugarland field, Texas, for example, where the decline in pressure is low because 85 percent or more of the gas produced with the oil is returned to the sand, the operators expect to recover about 70 percent of the oil originally contained in the formations.

The following, quoted from a special chapter on Phases of Technology in the Petroleum Industry, contained in the report, Energy Resources and National Policy, of the National Resources Committee, may also be of interest:

The significance of newly found engineering facts and resulting changes in production technology * * * can not be bounded by definite calendar limits. As in virtually all research, several years may be required to bring new ideas to a state of satisfactory practical application. However, there appears to be a definite trend toward greater efficiency and higher extraction. Less than 10 years ago frequent reference was made to recoveries ranging from 10 to 20 percent of the oil originally contained in the reservoir. Available figures show that fields operated in accordance with present knowledge of fluid and energy relations in the reservoirs and employing up-to-date equipment will produce 40 to 45 percent of their original oil. Some fields still in their producing lives where pressure maintenance has been practiced and where the available energy in the reservoir has been used advantageously have had recoveries as high as 70 percent of the oil originally contained in the formations.

In the early years there were no well-established ideas regarding the shape, constituents and characteristics of petroleum reservoirs and the composition and behavior of their contained fluids. Frequent reference was made to "lakes and rivers of oil", and even at a much later period in fields having a natural-gas cap the gas was wasted to the air in the honest but mistaken belief that this was the only feasible way the oil could be made to travel through the formations to the well.

Prior to 1920 experiments were performed by engineers of the Bureau of Mines that for the first time gave visual demonstrations of certain tendencies of behavior of oil, gas, and water in natural reservoirs and established some tentative subsurface relations between the fluids and surrounding rock material. Following that, extensive studies were made, as has been mentioned, of the function of natural gas in the production of oil. Through early work of that type, a coordinated program of research to give the industry a clearer picture of conditions within petroleum reservoirs and behavior of the fluids was developed within the Bureau, and research within the industry was stimulated. In general, the Bureau's research is directed toward the broad principles and underlying relations which can not well be dealt with by individual companies, and the company research is directed toward specific application of such principles. A few illustrations may aid in showing how research has contributed toward conservation.

RESEARCH ON PETROLEUM PRODUCTION

Reported sampling of crude oil at the bottoms of wells began in this country with a Bureau of Mines study made by Lindsly in the East Texas field. By means of a special sampling device the oil was brought to the surface under pressure without loss of its dissolved gas or other constituents. Subsequently this oil was examined in the laboratory to determine the pressure at which gas began to evolve, the quantity of gas liberated from the oil as it was brought to atmospheric pressure and temperature, and the shrinkage of the oil due to that gas liberation. Later Lindsly examined samples from the Crescent pool of Oklahoma and obtained data on pressure-volume-temperature relations of the fluid from which certain energy relations were developed. From such work the practice of collecting and analyzing subsurface samples has developed within the industry, and operators can now tell whether the gas produced from a well is equal to or in excess of that dissolved in the oil, and thereby form judgment as to whether the gas-oil ratio can be reduced to conserve reservoir energy.

Along with development of technique for examining subsurface samples, the Bureau has approached the problem from another direction by recombination and analysis of samples of gas and oil collected at the surface in the proportion of the gas-oil ratio. The analysis of such samples and interpretation of data from them involve much physical chemistry that may seem academic, but the results of the work are being applied in highly practical ways.

Such work has aided not only in conservation of gas in operation of wells but also in identification of producing horizons, estimation of reserves, and devising of means for separating oil and gas at the surface in a manner that promotes economy and reduces waste. The laboratory work has been especially helpful in operation of high-pressure fields containing wells of the so-called "distillate" or "condensate" type. The hydrocarbon mixtures in the reservoirs of some of the deeper fields are at pressures and temperatures which cause them to behave in a manner that seems impossible to those familiar only with condensation of simple substances or of mixtures at ordinary pressures. At the extreme pressures in such fields the reservoir fluid is gaseous, but liquid will condense from it as the pressure is reduced. Therefore, to avoid loss of valuable liquid products through condensation and wetting of the sand, gas is recycled to maintain the pressure. The reason for the seemingly anomalous behavior of such wells would not have been revealed, and the solution of the problem would not have been found, without laboratory work requiring highly developed apparatus and technique.

If time were available much might be said concerning detailed studies of individual fields to determine structural characteristics and behavior of typical reservoirs, development of methods for determining the porosity and permeability of producing rocks, experiments on flow of fluids through porous rocks and in vertical pipes, development and application of new methods of gaging and controlling gas wells that greatly reduce waste of gas, studies of mud fluids used to control high pressures and "heaving" formations in drilling, investigations of the function of water in the production of oil, and other research projects relating to field

operations in which the Bureau, members of the industry and various institutions have cooperated. Studies of the effect of dissolved gas on the characteristics of oil merit attention, but perhaps to say that in the industry oil with gas in solution is referred to as "live oil," and oil from which the gas has been released is called "dead oil", will give an impression of the effect of dissolved gas on the movement of oil through the porous rocks. Also mention should be made of work done by the Bureau to aid in reducing surface wastes, such as the studies of evaporation losses and of methods for preventing and treating emulsions of oil and water.

CONCLUSION

To an engineer whose major work has been in research directed toward efficiency and conservation in production of oil and gas, the basis for the needed further advance in conservation seems to lie in the development of increased knowledge concerning the character of our oil and gas resources and their behavior under the various conditions imposed by man, together with the dissemination of such knowledge among those engaged in the industry. Oil and gas fields must be looked upon as highly complicated engines, which can be operated efficiently only when their characteristics are well understood. Furthermore, we must learn to think in terms of the behavior of entire natural reservoirs rather than the behavior of individual wells or tracts.

To serve its purpose in conservation of petroleum, new engineering information should be applied in the operation of fields as soon as practicable after it becomes available. At best, there will be considerable lag between development of information and its application, so research workers should look far ahead.

Conservation of oil and gas has the general objective of making our reserves meet the public's future need for petroleum products at reasonable cost and a dependable rate. The public will derive no ultimate gain from low prices attending an excessive production and waste of resources in one period at the expense of a shortage with resulting high prices in another.

Although the objective seems simple, the details of the problem are as complex as some of the geologic structures in which oil is found, and although the basis for the solution lies in engineering and geologic knowledge, the application of that knowledge requires the interest and efforts of economists, lawyers, executives and statesmen, as well as those trained in technology.

UNIT OPERATION

The subject of unit operation is not new. A plan of unit operation of oil pools was advanced publicly by Henry L. Doherty, President of Henry L. Doherty and Company, in 1924 as a means of obviating waste due to unrestricted competition in producing oil and gas from a common reservoir. This whole broad subject of "unitization" (which someone has called the antithesis of competitive methods as practiced in the petroleum industry at the time the unit idea was proposed) can not be given detailed treatment here. However, a few remarks giving historical reference to specific unit operations in fields of the United States and in foreign countries, with particular attention to the engineering problems attending the operation of these pools as units, may be helpful. Unit operation on public and Indian lands will not be discussed except where brief mention may help develop the general picture of the broad subject.

Before going further it should be firmly established that the term "unitization" is subject to several definitions, depending upon the viewpoint, but fundamentally it refers "to the practice of unifying the ownership and control of an actual or prospective oil and/or gas pool by the issuance or assignment of units and undivided interests in the entire area with provisions for development and operation by an agent, trustee, or committee, representing all holders of undivided interests therein." From the foregoing statement, quoted from Mid-Continent Oil and Gas Association Handbook on Unitization of Oil Pools, Tulsa, Okla., 1930, page 15, it will be seen that unitization is to be distinguished from cooperative development and operation.

At the time unit operation was first proposed as a cure for unhealthy conditions in the petroleum industry, the concept was subjected to severe criticism by many persons who felt that such a procedure would be too restrictive to individual

property rights. It must be remembered that in 1924 and 1925 experiments in proration and attempts to allocate production equitably had not come to the foreground as recognized means of bringing about an orderly production of petroleum.

Under the then prevailing theory of property law in the United States, a land owner, lessee, or operator might drill his wells and develop his property as he pleased, regardless of the effect upon adjacent land owners. The only protection against drainage of oil and gas across property lines was for the neighboring operator to drill offset wells and produce whatever oil and gas could be obtained from them. Robert E. Hardwicke in discussing a paper by R. D. Wyckoff, *The Relation of Well Potentials, Sand Permeability, and Well Pressures to Allocation of Production* (Drilling and Production Practice, 1934, Am. Petrol. Inst.), gave in simple language a studied view of the terms "rule of capture" and "rule of ownership in place." The following paragraph, briefed from Hardwicke's more detailed statement, may help to clarify these terms because they must be understood in any consideration of unit operation; particularly in relation to present-day operating theories and the engineering practices that are involved.

The so-called "rule of capture", which is recognition of title to oil produced from a well, exists in every State. Until the State exercises its police power, an owner of land may drill in any way he may elect, and the only recourse of an adjoining landowner is to protect his property by offset wells. In theory, at least, the offset wells virtually confine the oil of each man to his own property. As long as a man is free to do as he chooses, he can in a measure protect himself. When government restricts his freedom to act to protect his property, the rule of capture becomes inoperative, except to the extent that a man uses what comes out of his well. The rule of capture is not necessarily inconsistent with that of ownership in place, and a constitutional amendment is not needed to establish better rules for protection of property. Adjacent operators have certain quantities of oil and gas underlying their respective properties. An equitable proration or allocation order is in effect a plan of operating procedure to prevent undue drainage without the necessity of the neighboring landowners engaging in an offset drilling campaign.

From the foregoing briefed statement it is seen that drainage across property lines is one of the main considerations resulting from uncontrolled drilling that may be met on a practical engineering basis in pools where conditions permit them to be operated properly under a unit plan. Then, too, the costs attending the drilling of unnecessary offset wells is minimized where the management is vested in one operating head and surface property lines are not the controlling factor.

The complete record of public hearings of the Federal Oil Conservation Board, February 10 and 11, 1926, and later symposiums in the publications of the American Institute of Mining and Metallurgical Engineers and the American Petroleum Institute, the Handbook on Unitization of Oil Pools, published by the Mid-Continent Oil and Gas Association in 1930 (from which a previous quotation has been taken), the writing of Leroy H. Hines of the Geological Survey in 1934, entitled *Some Aspects of Unit Operation of Oil and Gas Pools and Fields*, and many other public writings in the petroleum and legal press, set forth the principles of unitization and unit development and operation.

Virtually all of these writings show that many legal considerations have complicated the problem of unit operation, and, as has been suggested, the individualistic ideas of capture that predominated within the industry for a number of years deterred it from a general acceptance of the unit theory of oil-field development. However, from the strictly technical standpoint, few engineers who have studied the behavior of natural petroleum reservoirs will hold that development and operation of pools as units are contrary to the best application of the principles of known physical laws. Although much knowledge is still to be developed regarding reservoir behavior, there seem to be no technical reasons why the quantity of oil and gas within the structural confines of the respective original properties in a common pool can not be estimated and allocated with fair accuracy. In fact, realization that the motivating forces driving oil to the wells are derived from the energy contained in the dissolved and "free" gas in a reservoir or from the hydrostatic head of water back of the oil, and further, that one operator by inefficient production practices can dissipate another's rightful share of the reservoir energy, has led some operators to unitize their holdings and operate the field as a unit.

Most of these unit operations have been on a voluntary basis because (as C. B. Ames, then Chairman of the Board, The Texas Co., stated in 1930 before the American Petroleum Institute), "He (the operator) can not be forced into unit operation, and therefore unitization must rest upon consent and not compulsion. As a diversity of interests sometimes prevents consent, progress in unitization can only be made gradually and by persuasion."

An outstanding exception is the compulsory unitization of city blocks in Oxford, Kans., prior to 1928, sustained through the various courts on the grounds of health and fire hazards and on the additional basis that each individual owner in the block would receive his fair share of the oil without being deprived of his constitutional right to drill. The case has been treated in some detail by W. P. Z. German in his paper, "Compulsory Unit Operation of Oil Pools", Trans. Am. Inst. Min. and Met. Engrs., Petroleum Development and Technology, 1931.

The unit development of the Van pool in Van Zandt Co., Texas, operated as if under single ownership by the Pure Oil Company for the account of the associated companies often has been referred to as an outstanding example of the application of efficient engineering technique permitting maximum recovery of oil and gas at minimum cost.

The operating agreement under the Van Joint Account became effective in November 1929, and it is reasonable to suppose that at present the operating company has essentially all of the geological and engineering information needed to plan a future program of extraction to the ultimate life of the field. Ralph Alexander Liddle in reporting on the Van field in a University of Texas Bulletin No. 3601, has stated that the method of allocating production to each lease holder has approached the ideal—giving to each participant the oil which he actually was entitled to have under his lease. In January 1936, Liddle reported, "In the present proration (allocation of production) method 50 percent is accorded to acre-feet of Woodbine formation above water level under each lease and 50 percent to static bottom-hole pressure under the lease—the pressure factor theoretically compensating for structural position of wells and leases."

When it became necessary to make readjustments under the terms of the agreement of the Van Joint Account, knowledge regarding the characteristics of the oil in the reservoir was needed to make fair approximations of the quantity of oil yet to be recovered from the reservoir sands of the unitized area. It is significant that shortly before this readjustment the Bureau of Mines had developed a means of taking bottom-hole samples of oil under pressure, bringing them to the surface, and analyzing them in order to determine the characteristics of the reservoir fluids. This research made it possible to determine some of the effects of gas coming out of solution in the oil and the change in volume content of the oil at the surface as compared with its volume in place in the reservoir. Bureau engineers made these studies in the Van pool as a part of their scientific work, and the results were stated to be of great value in making the required plans for future development of the field. This is cited as an outstanding example of technical requirements attending successful unit operation that have been met by applying the advanced technique of petroleum engineers.

When a company owns a complete structure, many legal difficulties that hinder unitization and subsequent operations in fields where the property ownership is diversified are not present. It should not be forgotten, however, that one of the greatest hindrances to satisfactory unit operation in many pools is the viewpoint of the land owners whose sole interest usually is in the royalty they may get from the oil and gas produced from their properties. Frequently the land owner is an agriculturalist whose experiences have led him to expect the recurrence of crops and the cyclic reproduction of live stock. For that reason in his position of "landlord" he is likely to be anxious to have harvested what he considers the "crop" of oil so that he may collect his share. Time and again operators have been forced to fulfill lease provisions immediately to the letter causing them to drill new wells and produce excess oil in the face of uneconomic circumstances. This condition exists wherever the oil operator does not hold the land in fee.

A frequently cited example of a successfully operated field where the entire structure is controlled by one company is the Sugarland oil field in Fort Bend County, Texas. The operating company took a forward-looking view and was willing to risk large sums of money on what initially was considered nothing more than an experiment to determine the technologic and economic possibilities of entirely eliminating gas wastage from the field by pumping the gas produced with the oil back into the formation, thereby maintaining the reservoir pressure as near the original pressure as possible. A large contributing factor to the

success of this unit development was the attitude of the royalty interests who had scattered holdings throughout the fields. These interests were willing to have wells producing with high gas-oil ratios closed in on their properties high on the structure, because they were compensated by a quantity of oil equivalent to what these wells would have produced taken from other wells with low gas-oil ratios on their properties on the flanks of the structure. A detailed review of the operations in the Sugarland field has been given by H. C. Miller and Ben E. Lindsly, pages 1206-1208 in their report prepared in connection with H. Res. 441 (Hearings before a Subcommittee of the Committee on Interstate and Foreign Commerce, House of Representatives, Seventy-third Congress on H. Res. 441, Part 2).

Another example of a field that is being operated by one company with the view of maintaining the pressure in the reservoir throughout its oil-producing life is the Tepetate field in Louisiana. To the end of recovering as much fluid as possible from the reservoir under flowing conditions of operation and reducing mechanical-lifting costs, steps were taken early in the life of the field to maintain the pressure in the producing horizon at or near the original pressure. Briefly, the oil and gas are produced under controlled conditions, the liquid constituents are separated from the gas in high-pressure equipment, and the processed gas is compressed and returned to the producing horizon through carefully selected input wells at a pressure slightly greater than the pressure in the reservoir. Theoretically, such a recycling process should bring virtually all of the liquid hydrocarbons to the surface, and in the end a reservoir of gas should remain to be drawn upon for use as fuel.

This trend in modern production technique, as exemplified at Tepetate, is in direct contrast with the wide-open methods of production that were prevalent during earlier periods of the industry's life, and it is exceedingly doubtful whether such a comprehensive and costly program could have been planned and put into effect if the oil and gas rights has been held by diversified interests.

The operations of the Anglo-Iranian Oil Co. and the Iraq Petroleum Co., and more recently those of the Standard Oil Co. of California on the Island of Bahrein are outstanding examples of the functioning of unit operations and the application of technical practices on a large scale in foreign countries in which concessions permit full control of large blocks of acreage comprising one of more geologic structures where oil and gas have collected in commercial quantities.

Sir John Cadman (now Lord Cadman), Chairman, Anglo-Iranian Oil Company, Great Britain, has described at length the advantages of unit operation as conducted by his company under concession terms permitting the "taking up of large blocks of territory sufficient to cover geological units." His paper, *Conservation of Petroleum before the Third World Power Conference*, Washington, 1936 (Vol. VI, pp. 755-761), shows how the Iran and Iraq oil companies have conserved gas energy to assist migration of oil within the natural reservoirs and have used the natural expulsive force economically. Cadman also discusses the advantages that have accrued because of lower development costs through the elimination of unnecessary drilling and multiplication of plants.

In this connection he said:

The most striking illustrations are probably to be found in the Kirkuk field of the Iraq Petroleum Company, where a total of some 45 wells has been sufficient for effective delimitation of the field and to meet the production requirements of their 1,170 miles of pipe line to the Mediterranean coast. The line is of 30 millions of barrels per annum capacity and production in 1935 approximated to 27 millions of barrels. In the Haft Kel field of the Anglo-Iranian Oil Company, from which approximately 27 million barrels were produced in 1935, a total of some 40 wells has been sufficient for delimitation and production purposes.

A third advantage enjoyed by these large concessionaires is what Cadman terms "harnessing production to consumption", and fourth, the storage in suitably porous underground strata of liquid petroleum products not immediately remunerative.

It should be realized in reading Cadman's complete paper that some of the advantages described by him which apply to the development of his company's properties could not be applied in their entirety under the American system even when the structure is held by so few operators that a unit plan is possible and workable—as in the Kettleman Hills North Dome field in California, where an excellent opportunity was afforded to unitize the several holdings and operate

them under a single management. The acreage overlying the pool is owned mainly by the Federal Government and the Standard Oil Co. of California, the remaining land being held in fee by a few individuals who had leased their holdings to oil companies. The Standard Oil Co. is not a member of the Kettleman North Dome Association, but operations on its properties in the field have been conducted in general harmony with those of the unitized part.

SUMMARY

From the foregoing brief review of some phases of unit operation, it is seen that where unitization has been put into effect, the results from a conservation viewpoint have been beneficial. However, voluntary unitization has not been applied generally in oil fields in the United States because—with outstanding exceptions—the individualistic theory has predominated, and when one or more individuals refuse to join, the whole attempt may fail.

Then too, a relatively large part of the industry believes that the theories of ownership embodied in the rule of capture and the rule of ownership in place are not incompatible in the light of present engineering knowledge of the behavior of natural petroleum reservoirs.

Few persons will contend that the rule of capture as applied in the past history of the industry has resulted in other than uneconomic conditions. Although in theory protective drilling may tend to restrict to each property owner the oil and gas within the confines of his subsurface holdings, actually the possibility of movement across property lines is well-recognized. Not infrequently the abuses of offset drilling, sometimes resulting in ruthless tactics to encourage cross-property drainage, have caused premature exhaustion of the reservoir energy and depletion of the oil and gas reserves and have led to costly lawsuits. In many instances, even when offset drilling has not been ruthless, an unnecessary density of wells on both sides of the property line has raised the production costs for each operator to totals out of all line with development requirements.

Despite the evident disorder that has resulted from this rule that grew out of a condition where scientific knowledge was lacking, it is worthwhile to observe what may result by interpreting and applying the rule in the light of present knowledge. It is possible that such a course of action may lead to a desirable state of stabilization and permit the taking of oil and gas from a pool in an orderly manner. The desirable objective is to accomplish this with minimum cost of wells drilled to the producing horizons through a program of optimum well spacing and with reduced operating costs through full utilization of energy in the reservoir system, thereby prolonging the flowing life of the field.

Engineering knowledge has established the fact that the maintenance of correct pressure gradients between wells prevents cross-drainage, premature water encroachment, shifting of the gas cap, and other changes detrimental to proper pressure conditions within the reservoir. In effect, this suggested concept of the reconcilability of the rule of capture and the rule of ownership in place, combined with an allocation formula based upon sound engineering principles, may be the means of operating an entire pool for the optimum benefit of all concerned regardless of diversified ownership and not as separate parcels with no apparent relation to one another. In this way many of the same objectives would be accomplished as if the pool were under one management in some form of unit operation.

EXHIBIT No. 1311

[Copy submitted by Geological Survey, Department of the Interior]

FEDERAL LAWS ON UNIT OPERATION

1. Authority of permittees and lessees to unitize. (Sec. 27 of the act of Feb. 25, 1920, as amended March 4, 1931.)

"For the purpose of more properly conserving the natural resources of any single oil or gas pool or field, permittees and lessees thereof and their representatives may unite with each other or jointly or separately with others in collectively adopting and operating under a cooperative or unit plan of development or operation of said pool or field, whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest."

2. Authority of Secretary to require unitization. (Sec. 17 of the act of Feb. 25, 1920, as amended August 21, 1935.)

"The Secretary of the Interior, for the purpose of more properly conserving the oil or gas resources of any area, field, or pool, may require that leases hereafter issued under any section of this act be conditioned upon an agreement by the lessee to operate under such reasonable cooperative or unit plan for the development and operation of any such area, field, or pool as said Secretary may determine to be practicable and necessary or advisable, which plan shall adequately protect the rights of all parties in interest, including the United States."

3. Authority to modify leases or permits and make regulations. (Sec. 27 of the act of Feb. 25, 1920, as amended March 4, 1931.)

"The Secretary of the Interior is thereunto authorized (For the purpose of more properly conserving the natural resources of any single oil or gas pool or field under a cooperative or unit plan of development and operation), in his discretion, with the consent of the holders of leases or permits involved, to establish, alter, change, or revoke drilling, producing, and royalty requirements of such leases or permits, and to make such regulations with reference to such leases and permits with like consent on the part of the lessee or lessees and permittees in connection with the institution and operation of any such cooperative or unit plan as he may deem necessary or proper to secure the proper protection of such public interest."

4. Extension of 20-year leases. (Sec. 17 of the act of Feb. 25, 1920, as amended March 4, 1931, and August 21, 1935.)

"Any such lease (issued prior to August 21, 1935) that has become the subject of a cooperative or unit plan of development or operation, or other plan for the conservation of the oil and gas of a single area, field, or pool, which plan has the approval of the Secretary of the Department or Departments having jurisdiction over the Government lands included in said plan as necessary or convenient in the public interest, shall continue in force beyond said period of twenty years until the termination of such plan; And provided further, That said Secretary or Secretaries shall report all leases so continued to Congress at the beginning of its next regular session after the date of such continuance."

5. Exception in determining holdings or control. (Sec. 17 of the act of Feb. 25, 1920, as amended August 21, 1935.)

"All leases operated under such plan approved or prescribed by said Secretary (Secretary of the Interior) shall be excepted in determining holdings or control under the provisions of any section of this Act."

6. Issuance of lease without further proof of discovery. (Sec. 27 of the act of Feb. 25, 1920, as amended March 4, 1931.)

"When any permit has been determined to be wholly or in part within the limits of a producing oil or gas field which permit has been included, with the approval of the Secretary of the Interior, in a unit operating agreement or other plan under this Act the Secretary of the Interior may issue a lease for the area of the permit so included in said plan without further proof of discovery."

7. Vested authority to control prospecting, development, and production. (Sec. 17 of the act of Feb. 25, 1920, as amended August 21, 1935.)

"Any cooperative or unit plan of development and operation which includes lands owned by the United States, shall contain a provision whereby authority, limited as therein provided, is vested in the Secretary of the Department or Departments having jurisdiction over such land to alter or modify from time to time in his discretion the rate of prospecting and development and the quantity and rate of production under said plan."

8. Authority to approve operating agreements regardless of acreage limitations. (Sec. 27 of the act of Feb. 25, 1920, as amended March 4, 1931.)

Closely related to unitization provisions is the following which, under departmental practice, is used as a preliminary to unitization of some wildcat areas. In such cases the unit plan is negotiated in final form and approved as an operating agreement, such approval to be followed by execution as a unit plan only if and when a discovery of oil or gas is made.

"The Secretary of the Interior is hereby authorized, on such conditions as he may prescribe, to approve operating, drilling or development contracts made by one or more permittees or lessees in oil or gas leases or permits, with one or more persons, associations, or corporations, whenever in his discretion and regardless of acreage limitations, provided for in this Act, the conservation of natural products or the public convenience or necessity may require it or the interests of the United States may be best subserved thereby."

9. Extension of permits.

The act of August 26, 1937, extended to December 31, 1939, oil and gas prospecting permits outstanding on December 31, 1937, (1) committed to a cooperative or unit plan of development operation approved, under revision pursuant to

prior review, or filed prior to January 1, 1937, and rejected; and (2) for which an acceptable plan had been filed by December 31, 1937, if the permit were issued after August 21, 1935.

"EXHIBITS Nos. 1312-1317" are printed separately as Hearings, Part 17-A.

EXHIBIT No. 1318

COMPARISON OF TOTAL ASSETS OF MAJOR OIL COMPANIES IN 1929 AND 1938

1929	TOTAL ASSETS (MILLIONS DOLLARS)	CUMULATIVE PERCENTAGE	RELATIVE POSITION	1938		
				RELATIVE POSITION	CUMULATIVE PERCENTAGE	TOTAL ASSETS (MILLIONS DOLLARS)
1,767	23.3	1st	STANDARD OIL CO. (NEW JERSEY)	1st	25.2	2,045
708	32.6	2nd	SOCIETY-VACUUM OIL CO. INC.	2nd	36.5	919
697	41.8	3rd	STANDARD OIL CO. (INDIANA)	3rd	45.4	725
810	49.8	4th	THE TEXAS CORPORATION	4th	52.9	605
605	57.8	5th	STANDARD OIL CO. OF CALIF.	5th	60.3	601
487	64.2	6th	SHELL UNION OIL CORP.	6th	67.0	547
431	69.9	7th	GULF OIL CORP.	7th	71.9	398
401	75.2	8th	CONSOLIDATED OIL CORP.	8th	76.3	357
327	79.5	9th	EMPIRE GAS AND FUEL CO.*	9th	80.5	337
251	82.8	10th	THE OHIO OIL CO.	10th	83.3	227
211	85.6	11th	UNION OIL CO.	11th	85.8	203
198	88.2	12th	PHILADELPHIA PETROLEUM CO.	12th	88.3	199
196	90.8	13th	PURE OIL CO.	13th	90.5	180
166	93.0	14th	CONTINENTAL OIL CO.	14th	92.5	166
145	94.9	15th	THE OHIO OIL CO.	15th	94.2	139
111	96.4	16th	SUN OIL CO.	16th	95.9	139
88	97.5	17th	MID-CONTINENT PETROLEUM CORP.	17th	97.4	125
85	98.6	18th	STANDARD OIL CO. (INDIANA)	18th	98.3	71
63	99.4	19th	SHELL OIL CO.	19th	99.1	64
49	100.0	20th	SHELL OIL CO.	20th	100.0	62

SOURCE: ANNUAL REPORTS TO STOCKHOLDERS AND MADDY'S INDUSTRIALS
* SUBSIDIARY OF CITIC SERVICE COMPANY

EXHIBIT No. 1319

EXECUTIVE OFFICE OF THE PRESIDENT,
NATIONAL RESOURCES PLANNING BOARD,
Washington, D. C., October 20, 1939.

HON. JOSEPH C. O'MAHONEY,
Chairman, Temporary National Economic Committee, Senate Office Building.

DEAR SENATOR O'MAHONEY: At the session of the Committee this morning I prepared a brief statement summing up the testimony which my associates and I presented before the Committee but because of the lateness of the hour and your

desire to hear Dr. White before the noon recess I refrained from taking the necessary time. Accordingly, I shall greatly appreciate it if you will insert in the record my statement which is attached hereto.

Please again permit me to thank you for your courtesies.

Sincerely yours,

RALPH J. WATKINS,
Economic Adviser.

Attachment.

Mr. Watkins' statement is included in the text as testimony, supra, p. 9603 et seq.

"EXHIBIT No. 1320" appears, in connection with "Exhibits Nos. 1136 and 1137," in Hearings, Part 14, appendix, p. 7426

EXHIBIT No. 1321

THE ATLANTIC REFINING COMPANY

PETROLEUM PRODUCTS

260 South Broad Street

PHILADELPHIA, PA., December 7, 1938.

In reply refer to file EO-C-AR.

The Honorable THURMAN ARNOLD,
Assistant Attorney General, Department of Justice,
Washington, D. C.

DEAR SIR: We acknowledge receipt of your letter of November 10th asking three questions in connection with the marketing of petroleum.

"1. Did the Atlantic Refining Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?"

Ans. Yes.

"(a) With what companies were such exchanges carried on?"

"(b) What quantities (in barrels) were exchanged with each company during each of the years indicated?"

"(c) What percentage of the motor fuel received on such exchanges was sold under the brands of the Atlantic Refining Company?"

Ans. See Statement No. 1 enclosed.

"2. Did the Atlantic Refining Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?"

Ans. Yes.

"(a) From what companies were such purchases made?"

"(b) What quantities (in barrels) were purchased from each of the companies during each of the years indicated?"

"(c) What percentage of motor fuel so purchased was sold under the brands of the Atlantic Refining Company?"

Ans. See Statement No. 2 enclosed.

"3. The name and address of the official of the Atlantic Refining Company conversant with such motor fuel exchanges and purchases."

Ans. W. C. Yeager, Vice President,
260 South Broad Street,
Philadelphia, Pennsylvania.

Very truly yours,

ROBERT H. COLLEY.

STATEMENT 1

COMPANIES WITH WHICH THE ATLANTIC REFINING COMPANY ENGAGED IN THE EXCHANGE OF MOTOR FUEL (REQUIRING NO FURTHER PROCESSING OR BLENDING FOR CONSUMER DISTRIBUTION) WITH OTHER COMPANIES MARKETING BRANDED MOTOR FUEL

- (a) Other Company. (b) Receipts by Atlantic in bbls. of 42 gals.

Socony-Vacuum Oil Co. 1935—59,622 bbls.

This was obtained to offset an extraordinary and unexpected draft on inventory. The material was made according to our specifications, moved in our boats to our terminals and blended with similar material of our own manufacture.

Orange State Oil Co. (other). 1935—1,382 bbls. 1936—1,012 bbls.

This was arranged to overcome emergency and temporary shortages at water terminals in Florida due to inadequacy of supply. Returned at the same place.

Pure Oil Co. 1935—8,726 bbls. 1936—23,242 bbls. 1937—18,504 bbls.

This gasoline was sold and marketed as a secondary brand.

Tide Water Associated Oil Co. 1936—26,867 bbls. 1937—143,729 bbls.

This material was delivered to us according to our specifications.

Cities Service Oil Co. 1936—161 bbls. 1937—35,163 bbls.

This material was sold and marketed as a secondary brand.

Continental Oil Co. 1936—7,395 bbls. 1937—4,354 bbls.

This was arranged to overcome temporary shortages due to vessel delay.

Shell Oil Co. 1937—922 bbls.

This was arranged to overcome temporary shortages due to vessel delay.

James River Oil Co. 1937—176 bbls.

This exchange of a secondary brand of gasoline was made to accommodate them in an emergency.

Standard Oil Co. of Penna. 1935—36—37.

The Atlantic Refining Co. made deliveries to the Standard Oil Co. of Pa. in return for products delivered outside the United States to one of Atlantic's foreign affiliates. Since neither Atlantic nor its domestic subsidiaries received any gasoline on this exchange no volume is herewith reported.

- (c) In response to the question under 1 (c) as to the percentage of gasoline received on exchange which is sold under the brand of The Atlantic Refining Co. we regret that it is impossible for us to state such a percentage. The majority of the exchanges were made to meet emergencies and in those cases practically all the gasoline was blended with our own manufactured product and thereafter sold under Atlantic's brand.

STATEMENT 2

PURCHASES BY ATLANTIC REFINING COMPANY OF MOTOR FUEL (REQUIRING NO FURTHER PROCESSING OR BLENDING FOR CONSUMER DISTRIBUTION) FROM OTHER COMPANIES MARKETING BRANDED MOTOR FUEL FOR RESALE UNDER ITS OWN BRANDS

- (a) Names of Vendors. (b) Receipts by Atlantic in bbls. of 42 gals.

	1935	1936	1937
<i>Standard Oil Co. of N. J.</i>	131	171	632
<i>Gulf Refining Company.</i>	6,702	7,300	9,975
<i>Standard Oil Co. of N. Y. & Socony-Vacuum Oil Co.</i>	377	333	740
<i>Standard Oil Co. of Ky.</i>		127	1,604

The above 4 items covered purchases of gasoline meeting specifications of Ethyl gasoline.

Gulf Refining Company.

This material was made according to our specifications and blended with similar material of our own manufacture.

Crown Central Petroleum Co.

Purchased to overcome an emergency shortage of one of our terminals.

James B. Berry Sons Co.

This material was purchased to meet an emergency shortage and was manufactured in accordance with our specifications.

Jenney Mfg. Co.

Colonial Beacon Oil Co.

- (c) In response to question under 2 (c) as to the percentage of purchased gasoline which is sold under brand of The Atlantic Refining Co. we regret that it is impossible for us to derive such a percentage. However, we believe that the gasoline purchased in the first four items was all sold as Ethyl gasoline. It is impossible for us to determine definitely the percentage of the last five items which was sold under the brands of The Atlantic Refining Co. since much of this was blended with other gasoline manufactured by Atlantic.

CONSOLIDATED OIL CORPORATION,
630 FIFTH AVENUE,
New York, N. Y., December 29, 1938.

Honorable THURMAN ARNOLD,
Assistant Attorney General, Washington, D. C.

HBC
60-57-M

DEAR SIR: We acknowledge receipt of your letter of November 10, 1938, in re exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies.

Consolidated Oil Corporation is exclusively a holding company and does not engage in any phase of the oil business but we have acquired from our subsidiary companies, the Sinclair Refining Company, Richfield Oil Corporation of New York, and Sherwood Brothers, Inc., the information requested in your above letter and herewith enclose the same.

Rio Grande Oil Company, engaged in marketing (among other activities) in the Pacific Coast area, was a wholly owned subsidiary of Consolidated Oil Corporation during the period January 1, 1935 to March 31, 1936, at which latter date Consolidated Oil Corporation ceased to own sole control. Rio Grande Oil Company was dissolved in December, 1937. The detailed records which would be necessary to a compilation of answers to the questions with respect to exchanges or purchases of motor fuel are not readily available and such answers have, therefore, been omitted. It is felt that the omission may be deemed unimportant in that the total sales of motor fuel by Rio Grande Oil Company during the period January 1, 1935 to March 31, 1936 comprised less than 4% of the combined total of such sales by wholly owned domestic subsidiaries of Consolidated Oil Corporation during such period.

Very truly yours,

H. R. GALLAGHER,
President.

Enc:

ANSWER TO REQUEST CONTAINED IN LETTER DATED NOVEMBER 10, 1938, FROM DEPARTMENT OF JUSTICE IN REGARD TO MOTOR FUEL RECEIVED UNDER EXCHANGES WITH, AND MOTOR FUEL PURCHASED FROM, OTHER COMPANIES MARKETING BRANDED MOTOR FUEL

Answers are hereinafter set forth with respect to each of the wholly owned subsidiaries of Consolidated Oil Corporation which were engaged in marketing motor fuel in the United States in the years 1935, 1936 and 1937.

SINCLAIR REFINING COMPANY

Question 1. Did Sinclair Refining Company, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. Yes.

Question 1(a). With what companies were such exchanges carried on?

Question 1 (b). What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer. The following tabulation indicates the companies with which such exchanges were carried on and the quantities which were received by Sinclair Refining Company from each company during each of the years indicated.

Name of company	Quantity received—barrels		
	1935	1936	1937
Arkansas Fuel Oil Corporation (Cities Ser.)			84,220
Cities Service Oil Company	41,378	45,196	117,566
Freedom Oil Works (Indep.)		98	
Gulf Oil Corporation		347	110,143
Ohio Oil Company	200,955	383,480	429,729
Pan American Petroleum Company (Indiana)	33,257	182,741	229,851
Pure Oil Company	878,945	1,051,597	1,085,351
Richfield Oil Corporation of N. Y.	251,472	485,590	584,430
Shell Petroleum Corporation	517,654	343,407	196,962
Skelly Oil Company	15,445	15,386	13,256
Socony Vacuum Oil Company	1,134,146	1,724,865	1,707,820
Standard Oil Company of N. J.	690,162	730,490	934,650
Texas Corporation		67,701	69,331
Utah Oil and Refining Company (Ind.)	82,292	108,118	137,040
Total	3,845,806	5,139,016	5,700,349

Question 1 (c). What percentage of the motor fuel received on such exchanges was sold under the brands of Sinclair Refining Company?

Answer. Of the Motor Fuel received on such exchanges, the following percentages can be identified as having been sold under the brands of Sinclair Refining Company: Substantially 100%. All the gasoline acquired in exchange, with a few exceptions, was based upon specifications and samples. There was some gasoline acquired without specifications but in those instances the company was familiar with the gasoline so acquired and had ascertained that such gasoline met its requirements.

Question 2. Did Sinclair Refining Company, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel?

Answer. Yes.

Question 2 (a). From what companies were such purchases made?

Question 2 (b). What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

Answer. The following tabulation indicates the companies from which such purchases were made and the quantities so purchased:

Name of company	Quantities purchased—barrels		
	1935	1936	1937
American Mineral Spirits Company			68,816
American Oil Company			161
Amsco Refining Company	951	2,666	2,091
Anderson & Pritchard Refining Corp.	44,434	18,347	8,000
Arkansas Fuel Oil Corporation		192	2,595
Atlas Oil Corporation		86,181	15,655
Atlantic Refining Company		146	
Arrow Refining Company	35,485		
Bell Oil and Gas Company	17,914	174,573	67,652
Black Gold Refining Company	10,238	25,546	21,422
Barnsdall Refining Company		30	647
Burford Oil Company		382	
Cascade Refining Company	10,486	15,246	4,774
Century Refining Company	22,138		
Chief Refining Company	8,787		
Crown Central Petroleum Company	30,067		
Continental Oil Company	8,652	6,978	1,639
Cushing Refining and Gas Company	10,624	16,496	11,293
Col-Tex Refining Company	74,119	48,218	70,593
Cosden Oil Corporation	8,703	6,358	5,356
Champlin Refining Company		38,946	32,949
Cities Service Oil Company		12	15
Cosco Oil Company		964	
Chalmers Petroleum Company			432
Daniger Oil and Refining, Inc.	4,978	36,755	115,816
Dominant Refining Company	6,846		
Deep Rock Oil Corporation			65
East Texas Refining Company	24,345	343,671	158,326
Eastern States Petroleum Company	19,512		
Elk Refining Company	6,352	1,928	
Eso : Oil Company	105,351	92,885	71,599
Freedom Oil Works	385		
Falls Refining Company		948	382
Gliland Refining Company	131,621	41,384	

Name of company	Quantities purchased—barrels		
	1935	1936	1937
Gulf Refining Company.....	34, 736	50, 123	8, 901
Gulf Oil Corporation.....	40, 796	110, 650	179, 625
Gratex Refining Company.....	583	3, 725	3, 729
General American Oil Company.....		145, 561	34, 147
Hurricane Petroleum Corporation.....	58, 724	108, 934	70, 942
Houston Oil Company of Texas.....	2, 290	2, 694	1, 519
Humble Oil and Refining Company.....	26	589	850
Johnson and Burnham, Inc.....	1, 712		
Kilgare Refining Company.....		14, 156	2, 872
Kanatex Refining Company.....			37, 994
Lion Oil and Refining Company.....	8, 276	16, 003	11, 570
Louisiana Oil and Refining Corporation.....	61, 183	8, 695	2
LaPre Refining Company.....	5, 395		
Lone Star Refining Company.....	1, 359		
Marimac Oil Company.....	9, 396	2, 129	
Mathews Refining Company.....	2, 670		
McMurrey Brothers Refining Company.....	6, 673	17, 405	18, 906
Magnolia Petroleum Corporation.....	190	343	749
Master Petroleum Corporation.....	88		
Marathon Oil Company.....		31, 457	
Mid-Continent Petroleum Company.....		365	1, 378
Moutray Oil Company.....		16, 448	17, 125
Ocean Petroleum Corporation.....	5, 906	10, 740	
Oil Refiners, Inc.....	40, 216		
Octane Oil and Refining Company.....	23, 112	16, 404	
Omar Refining Company.....	39, 115	22, 467	4, 786
Onyx Refining Company.....	984	2, 490	11, 809
Ohio Oil Company.....		28, 619	105, 823
Olney Oil and Refining Company.....		27, 553	9, 006
Orange State Oil Company.....			2, 800
Phillips Petroleum Company.....	84, 084	109, 418	76, 404
Premier Oil and Refining Company of Texas.....	62, 602	84, 520	18, 123
Pure Oil Company.....	27, 504		225
Panhandle Refining Company.....	94, 056	120, 549	76, 215
Pasotex Refining Company.....	498		
Phoenix Refining Company.....	2, 395	7, 917	3, 482
Pennsylvania Refining Company.....	2, 856	3, 872	
Pennzoll Company.....			304
Pan American Petroleum Company.....			34
Republic Oil Company.....	29, 942		
Richfield Oil Corporation of N. Y.....	312	685	1, 049
Rock Island Refining Company.....	5, 800	18, 642	1, 429
Rodessa Oil Company.....		3, 277	126, 220
Southport Petroleum Company.....	54, 662		
Socony Vacuum Oil Company.....	1, 247	1, 190	732
Standard Oil Company of N. J.....	83		241
Standard Oil Company of N. Y.....	1, 540	2, 179	3, 235
Superior Oil Works.....	5, 741	4, 848	581
Shell Petroleum Corporation.....	25	66	198
Skelly Oil Company.....	51	611	1, 129
Standard Oil Company of Indiana.....	195	43	7, 500
Standard Oil Company of Kentucky.....	6, 005	7, 187	6, 264
Shamrock Oil and Gas Company.....	26, 717	18, 448	6, 475
Simms Oil Company.....	10, 366		
Southland Refining Company.....	1, 363	7, 856	8, 807
Spartan Oil Corporation.....	4		
Standard Oil Company of California.....	28	85	110
Standard Oil Company of Texas.....	378	932	1, 529
Solvex Refiners, Inc.....			36, 644
Standard Oil Company of Louisiana.....			12
Texas Oil Products Company.....	82, 452	17, 896	
Texover Refining Company.....	2, 200		
Trio Refining Company.....	9, 263	4, 739	
Tyler Refining Company.....	959		
Tyresco Refining Company.....	26, 650	15, 424	
Texas Pacific Coal and Oil Company.....	26, 251	195	
Taylor Refining Company.....	3, 860	47, 744	31, 589
Tower Refining Company.....	51	51, 527	11, 451
Trinity Refining Company.....		43, 751	4, 819
The Texas Company.....		1, 013	4, 037
Taxmann Refining Company.....		14, 626	
Tidewater Associated Oil Company.....			114
Utah Oil Refining Company.....		61	529
Valvolene Oil Company.....	1, 532	3, 504	350
Valley Refining Company.....	4, 104	4, 675	5, 006
Wabash Refining Company.....	4, 167		
Wolverine Empire Refining Company.....	15, 951	15, 140	240
Wirt Franklin Petroleum Company.....	26, 607		50
West Texas Refining Company.....	1, 353	8, 694	8, 796
Waggoner Refining Company.....		5, 988	14, 990
Total.....	1, 549, 121	2, 224, 599	1, 644, 854

Question 2 (c). What percentage of the motor fuel so purchased was sold under the brands of Sinclair Refining Company?

Answer. The following tabulation indicates—

- (a) The percentages which can be identified as having been sold under the brands of Sinclair Refining Company
- (b) The percentages sold or delivered as unbranded motor fuel, and
- (c) The percentages commingled with other stocks of motor fuel in possession of Sinclair Refining Company, the disposition of such percentages not being susceptible to specific identification.

	1935	1936	1937
(a).....	65.25%	64.61%	76.59%
(b).....	.02%	.03%	.11%
(c).....	34.73%	35.36%	23.30%

All gasoline purchased was purchased on specifications.

Question 3. The name and the address of the official conversant with such motor fuel exchanges and purchases:

Answer. With respect to purchases—Mr. J. W. Carnes, Vice President, 630 Fifth Avenue, New York, N. Y. With respect to exchanges—Mr. G. H. Taber, Jr., Vice President, 630 Fifth Avenue, New York, N. Y.

ANSWER TO REQUEST CONTAINED IN LETTER DATED NOVEMBER 10, 1938, FROM DEPARTMENT OF JUSTICE IN REGARD TO MOTOR FUEL RECEIVED UNDER EXCHANGES WITH, AND MOTOR FUEL PURCHASED FROM, OTHER COMPANIES MARKETING BRANDED MOTOR FUEL

RICHFIELD OIL CORPORATION OF NEW YORK AND WHOLLY OWNED SUBSIDIARIES
(CONSOLIDATED)

The capital stock of this company is owned 100% by the Sinclair Refining Company (wholly owned subsidiary of Consolidated Oil Corporation.)

Question 1. Did "Richfield" in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. Yes.

Question 1 (a). With what companies were such exchanges carried on?

Question 1 (b). What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer. The following tabulation indicates the companies with which such exchanges were carried on and the quantities which were received by "Richfield" from each company during each of the years indicated:

Name of company	Quantity received—Barrels		
	1935	1936	1937
The American Oil Company.....	2,588		
Cities Service Oil and Crew Leveck Company.....	294,059	299,115	293,642
Colonial Beacon Oil Company.....	3	429	
Continental Oil Company.....	148,529	218,009	452,323
Gulf Oil Corporation.....	2,696		
Republic Oil Company.....	13,239		
Shell Union Oil Corporation.....	14,623	22	
Sinclair Refining Company.....	257,724	477,324	606,314
Warner Quinlan Company.....	1,419	12	
Total.....	734,780	994,911	1,352,279

Question 1 (c). What percentage of the motor fuel received on such exchanges was sold under the brands of "Richfield"?

Answer. The following tabulation indicates—

- (a) The percentages which can be identified as having been sold under the brands of "Richfield"
- (b) The percentages sold or delivered as unbranded motor fuel, and
- (c) The percentages commingled with other stocks of motor fuel in possession of "Richfield," the disposition of such percentages not being susceptible to specific identification.

	1935	1936	1937
(a).....	None	59.50%	54.85%
(b).....	None	1.01%	5.72%
(c).....	100%	39.49%	39.43%

All the gasoline acquired in exchange, with a few exceptions, was based upon specifications and samples. There was some gasoline acquired without specifications but in those instances the company was familiar with the gasoline so acquired and had ascertained that such gasoline met its requirements.

Question 2. Did "Richfield" in the years 1935, 1936, and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by "Richfield" under its own brands?

Answer. Yes.

Question 2 (a). From what companies were such purchases made?

Question 2 (b). What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

Answer. The following tabulation indicates the companies from which such purchases were made and the quantities so purchased.

Name of company	Quantity purchased—barrels		
	1935	1936	1937
Atlantic Refining Company.....		91	
Arkansas Natural Gas Corporation.....	2,488,357	536,718	378,070
Cities Service Company.....		113,428	131,186
Colonial Beacon Oil Company.....		621	
Louisiana Refining Company.....		725,546	51,003
Shell Petroleum Company.....	1,129	424	
Sherwood Brothers, Inc.....	1,351	2,240	1,529
Sinclair Refining Company.....	2,488,551	4,078,535	5,212,968
Socony Vacuum Oil Company.....	440		
Standard Oil Company of New Jersey.....		505	400
Standard Oil Company of New York.....	723	163	188
Total.....	4,980,551	5,458,271	5,775,344

Question 2 (c). What percentage of motor fuel so purchased was sold under the brands of "Richfield"?

Answer. All of the motor fuel so purchased became commingled with other stocks of motor fuel in possession of "Richfield" and no part of it can be specifically identified as having been sold under the brands of "Richfield."¹

Question 3. The name and the address of the official conversant with such motor fuel exchanges and purchases?

Answer. Mr. W. C. Burns, President, 630 Fifth Avenue, New York, N. Y.

¹ All gasoline purchased was purchased on specifications and a substantial quantity was further processed for consumer distribution.

ANSWER TO REQUEST CONTAINED IN LETTER DATED NOVEMBER 10, 1938, FROM DEPARTMENT OF JUSTICE IN REGARD TO MOTOR FUEL RECEIVED UNDER EXCHANGES WITH, AND MOTOR FUEL PURCHASED FROM, OTHER COMPANIES MARKETING BRANDED MOTOR FUEL

SHERWOOD BROTHERS, INCORPORATED

The capital stock of this company is owned 50% by the Richfield Oil Corporation of New York (wholly owned subsidiary of Sinclair Refining Company) and 50% by the Sinclair Refining Company (wholly owned subsidiary of Consolidated Oil Corporation).

Question 1. Did "Sherwood" in the years 1935, 1936, and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. No, except that in 1936 "Sherwood," as an accommodation to Shell Union Oil Corporation made certain emergency deliveries to a customer of Shell Union Oil Corporation. The aggregate of such deliveries was 583 barrels of motor fuel. Shell Union Oil Corporation subsequently made a return in kind and the motor fuel so returned was sold under the brands of "Sherwood" and/or Richfield Oil Corporation of New York.

Question 2. Did "Sherwood" in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by "Sherwood" under its own brands?

Answer. Yes.

Question 2 (a). From what companies were such purchases made?

Question 2 (b). What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

Answer. "Sherwood" purchased motor fuel in the quantities indicated below from Richfield Oil Corporation of New York:

1935.....	725, 025 barrels
1936.....	829, 014 "
1937.....	883, 637 "

Question 2 (c). What percentage of motor fuel so purchased was sold under the brands of "Sherwood?"

Answer. The motor fuel so purchased was disposed of as follows:

	1935	1936	1937
Percentage blended with Benzol and sold by "Sherwood" under its brands.....	14.15%	22.88%	27.69%
Percentage sold by "Sherwood" under the brands of Richfield Oil Corp. of N. Y.....	85.85%	77.12%	72.31%

All gasoline purchased was purchased on specifications.

Question 3. The name and the address of the official conversant with such motor fuel exchanges and purchases?

Answer. John W. Sherwood, President, 1433 Baltimore Trust Building, Baltimore, Maryland.

CONTINENTAL OIL COMPANY,
Ponca City, Oklahoma, January 7, 1939.

Mr. THURMAN ARNOLD,
Assistant Attorney General, Department of Justice,
Washington, D. C.

DEAR MR. ARNOLD: With further reference to your letter of November 10, 1938, file HBC 60-57-M:

In answer to your question #1: We are attaching statement #1, which shows names of the companies and the quantities of motor fuel we received during the years 1935, 1936, and 1937 in exchange with other companies who market their own branded motor fuel. One hundred percent of the gasoline we received was marketed by us under our brand names.

In answer to your question #2: We are attaching statement #2, which lists the names of those companies who to the best of our knowledge market branded

motor fuels, from whom we purchased motor fuel during the years 1935, 1936, and 1937. One hundred percent of this gasoline was resold by us under our own brands.

In answer to your question #3: L. T. Cramer, care of Continental Oil Company, Ponca City, Oklahoma.

Very truly yours,

L. T. CRAMER.

LTC-JVC
Enc 2

STATEMENT #1.—Statement of motor fuel received by Continental Oil Company and its subsidiaries—Years 1935/1936/1937—In exchange with other companies marketing branded motor fuels

[Expressed in 42 Gal. Bbls.]

Name	Year 1935	Year 1936	Year 1937
Atlantic Refining Company.....		11,750	
Barnsdall Refining Corporation.....	34,462	44,732	50,586
Champlin Refining Company.....	37,835		
Empire Oil & Refining Company.....	3,826		
Gulf Refining Company.....	58,889	90,557	95,756
Gulf Oil Corporation.....			
Magnolia Petroleum Company.....		8,133	34,816
Mid-Continent Petroleum Corporation.....	403,386	453,813	478,248
The Ohio Oil Company.....			910
Petroleum Heat & Power Company (Ind.).....		2,279	
Pure Oil Company.....	32,054	51,288	62,210
Richfield Oil Corporation.....	142,221	279,441	449,469
Shell Union Oil Corporation.....		4,690	125,546
Sinclair Refining Company.....	9,841		
The Texas Company.....	13,345	26,214	29,162
Total.....	735,859	972,897	1,326,693

PONCA CITY, OKLAHOMA, January 9, 1939.
LJM-M.

STATEMENT #2.—Statement of motor fuel purchases by Continental Oil Company and subsidiaries from other companies who to the best of our knowledge are marketing branded motor fuels

[Expressed in 42 Gal. Bbls.]

Name of company	Year 1935	Year 1936	Year 1937
Atlantic Refining Company.....	4,208		
The Bay Petroleum Corporation.....			5,139
Bell Oil & Gas Company.....	7,605	9,242	19,804
Black Gold Refining Company.....		11,887	192
Champlin Refining Company.....			9,589
Dickey Oil & Refining Company.....	2,139	6,736	11,911
Eason Oil Company.....			5,820
Eldorado Refining Company.....			1,336
Fletcher Oil Company.....	19,234	3,858	2,989
General Petroleum Corp. of Calif.....	241,961	256,952	336,566
Gulf Refining Company.....	1,688	28,070	36,085
Gulf Oil Corporation.....	1,899	20,446	11,591
Magnolia Petroleum Company.....			
Marathon Oil Company *.....		4,528	
The Ohio Oil Company *.....		571	12,885
Panhandle Refining Company.....	2,590		
Richfield Oil Corporation.....	1,251		
Rock Island Refining Company.....	2,519		195
Shamrock Oil & Gas Company.....	136,168	120,783	137,102
Simms Oil Company.....	9,043		
Sinclair Refining Company.....	91,605	34,257	30,955
Standard Oil Company of California.....	262,794	251,201	217,538
Standard Oil Company (Indiana).....	207,554	118,173	56,835
Standard Oil Company of New Jersey.....	189	831	
Standard Oil Company of Texas (Pasotex Petroleum Company) *.....	167,946	139,455	186,382

* Ohio Oil Company successors to Marathon Oil Company.

* Operated as Pasotex Petroleum Company 1935. Operated as Standard Oil Company of Texas 1936 and 1937.

STATEMENT #2.—*Statement of motor fuel purchases by Continental Oil Company and subsidiaries from other companies who to the best of our knowledge are marketing branded motor fuels*—Continued

[Expressed in 42 Gal. Bbls.]

Name of company	Year 1935	Year 1936	Year 1937
The Texas Company		1,350	294
Texas Pacific Coal & Oil Company	10,574		
Utah Oil Refining Company	457,706	523,029	620,241
Vickers Petroleum Company			2,508
Waggoner Refining Company	4,171	1,903	775
Yale Oil Corporation	4,151		
Sub Total	1,636,995	1,533,272	1,706,722
Miscellaneous	20,711	18,265	18,871
Total	1,675,706	1,551,537	1,725,593

PONCA CITY, OKLAHOMA, January 9, 1939.
LJM-M.

CITIES SERVICE COMPANY,
SIXTY WALL STREET,
New York, N. Y., January 4, 1939.

THE ATTORNEY GENERAL,
Department of Justice, Washington, D. C.

Re Your File HBC-60-57-M

DEAR SIR: Enclosed herewith please find the answers of Cities Service Company and its domestic subsidiaries engaged in the petroleum industry to the questions asked in the letter of Assistant Attorney General Thurman Arnold, dated November 10, 1938, in connection with the work of your Department for the Temporary National Economic Committee. Cities Service Company, the parent company, did not engage in any purchases or exchanges of petroleum products.

Very truly yours,

CITIES SERVICE COMPANY,
By E. H. JOHNSTON,
Vice-President.

ANSWERS TO QUESTIONS CONTAINED IN LETTER DATED NOVEMBER 10, 1938, FROM ASSISTANT ATTORNEY GENERAL THURMAN ARNOLD, IN CONNECTION WITH TEMPORARY NATIONAL ECONOMIC COMMITTEE

1. Did the Cities Service Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer: Cities Service Company did not. Certain of its domestic subsidiaries, as shown by the attached answers, did.

(a) With what companies were such exchanges carried on?

Answer: For Cities Service Company, none; see attached answers for domestic subsidiaries.

(b) What quantities (in bbls.) were exchanged with each company during the years indicated?

Answer: For Cities Service Company, none; see attached answers for domestic subsidiaries.

(c) What percentage of the motor fuel received on such exchanges was sold under the brands of the Cities Service Company?

Answer: For Cities Service Company, none; for percentage of exchanges sold under Cities Service brands, see attached answers of subsidiaries.

2. Did the Cities Service Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Answer: Cities Service Company made no such purchases; for purchases of domestic subsidiaries, see attached answers of those subsidiaries.

(a) From what companies were such purchases made?

Answer: None for Cities Service Company; see attached answers for domestic subsidiaries.

(b) What quantities (in bbls.) were purchased from each of the companies during each of the years indicated?

Answer: For Cities Service Company, none; for domestic subsidiaries see attached answers.

(c) What percentage of motor fuel so purchased was sold under the brands of Cities Service Company?

Answer: For Cities Service Company, none; for purchased motor fuel sold under Cities Service brands by domestic subsidiaries, see attached answers of those subsidiaries.

3. The name and address of the official of the Cities Service Company conversant with such motor fuel exchanges and purchases.

Answer: No such official of Cities Service Company; for officials of domestic subsidiaries familiar with motor fuel exchanges and purchases made by their respective companies, see attached answers of those companies.

ARKANSAS FUEL OIL COMPANY AND PREDECESSOR COMPANIES, LOUISIANA OIL REFINING CORPORATION AND LOUISIANA OIL CORPORATION

ANSWERS TO QUESTIONS CONTAINED IN LETTER DATED NOVEMBER 10, 1938, FROM ASSISTANT ATTORNEY GENERAL THURMAN ARNOLD, IN CONNECTION WITH TEMPORARY NATIONAL ECONOMIC COMMITTEE

1. Did the Cities Service Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer: The Arkansas-Louisiana companies mentioned above engaged in such exchanges.

(a) With what companies were such exchanges carried on?

Answer: Sinclair Refining Company, Pure Oil Company.

(b) What quantities (in bbls.) were exchanged with each company during the years indicated?

Answer:

	Barrels		
	1935	1936	1937
Sinclair Refining Co.....	None	None	88,378
Pure Oil Company.....	None	2,539	1,741

(c) What percentage of the motor fuel received on such exchanges was sold under the brands of the Cities Service Company?

Answer:

	1935	1936	1937
Approximate Percentage:			
Loreco Brand of Arkansas Fuel Oil Company.....	None	None	77.5%
Cities Service and Koolmotor Brands of Cities Service Oil Company (Delaware).....	None	100%	9.0%
Total Branded.....	None	100%	86.5%

2. Did the Cities Service Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Answer: The Arkansas-Louisiana companies listed above made such purchases.

(a) From what companies were such purchases made?

(b) What quantities (in bbls.) were purchased from each of the companies during each of the years indicated?

Answers:

(a) Companies	(b)		
	1935	1936	1937
American Petroleum Company.....	31,656		238
Ashland Oil & Refining Company.....			61
Atlantic Refining Company.....		2,404	
Atlas Oil Corporation.....		4,883	46,921
Crystal Oil Refining Company.....	192		575
East Texas Refining Company.....	203,223	16,498	5,539
Empire Oil & Refining Company.....	40,845	22,924	20,106
Gulf Oil Corporation.....		6,315	4,176
Gulf Refining Company.....	5,922	7,719	968
Hurricane Petroleum Company.....	1,339	10,449	36,108
Lion Oil Refining Company.....	195	12,810	2,916
Magnolia Petroleum Company.....	27,505	23,707	30,155
Phillips Petroleum Company.....	12	68	
Pure Oil Company.....	1,841		156
Republic Oil Company.....			2,504
Sinclair Refining Company.....		386	
Seaboard Oil Company.....	740		
Standard Oil Company of Kentucky.....	3,403		13,455
Standard Oil Company of Louisiana.....	45,902	2,839	
Standard Oil Company of New Jersey.....		5,336	
Southport Petroleum Company.....	579		
Total.....	363,354	116,338	163,878

(c) What percentage of motor fuel so purchased was sold under the brands of the Cities Service Company?

Answer:

	1935	1936	1937
Approximate Percentage:			
Loreco Brand of Arkansas Fuel Oil Company.....	51.0%	47.0%	73.5%
Cities Service and Koolimotor Brands of Cities Service Oil Company (Delaware).....	9.5%	23.5%	22.5%
Total Branded.....	60.5%	70.5%	96.0%

3. The name and address of the official of the Cities Service Company conversant with such motor fuel exchanges and purchases.

Answer: The name and address of the official conversant with the motor fuel exchanges and purchases listed above is Mr. John A. Welch, Arkansas Fuel Oil Company, Shreveport, Louisiana.

CITIES SERVICE OIL COMPANY (PENNSYLVANIA) ¹

ANSWERS TO QUESTIONS CONTAINED IN LETTER DATED NOVEMBER 10, 1933, FROM ASSISTANT ATTORNEY GENERAL THURMAN ARNOLD, IN CONNECTION WITH TEMPORARY NATIONAL ECONOMIC COMMITTEE

1. Did the Cities Service Company and its domestic subsidiaries, in the years 1935, 1936, and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

¹ On June 11, 1936, Crew Levick Company merged Cities Service Refining Company and certain other companies in the Cities Service group, and the new company was called Cities Service Oil Company, a Pennsylvania corporation. The data furnished here is for the present company from June 11, 1936, and for the Crew Levick Company and Cities Service Refining Company prior to that date.

Answer: Cities Service Oil Company (Pennsylvania) and predecessor-constituent companies engaged in such exchanges.

(a) With what companies were such exchanges carried on?

(b) What quantities (in bbls.) were exchanged with each company during the years indicated?

(c) What percentage of the motor fuel received on such exchanges was sold under the brands of the Cities Service Company?

The answers to subdivisions (a), (b) and (c) of question 1 are as follows:

Company	Exchanges			
	Barrels received			Percent sold under C. S. brands
	1935	1936	1937	
Atlantic Refining Co.....			20,464	100%
Richfield Oil Co. of N. Y.....	235,674	259,138	284,027	100%
Tidewater Oil Co.....		888		100%

2. Did the Cities Service Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Answer: Cities Service Oil Company (Pennsylvania) and predecessor-constituent companies made such purchases.

(a) From what companies were such purchases made?

(b) What quantities (in bbls.) were purchased from each of the companies during each of the years indicated?

(c) What percentage of motor fuel so purchased was sold under the brands of Cities Service Company?

The answers to subdivisions (a), (b) and (c) of question 2 are as follows:

Company	Purchases			
	Barrels			Percent sold under C. S. brands
	1935	1936	1937	
Atlantic Refining Co.....		10		100%
Empire Oil & Refining Co. and Cities Service Oil Co. (Del.).....	44,514	61,246	67,419	100%
Richfield Oil Co. of N. Y.....	9,480	2,028		100%
Sherwood Bros.....	96	86	122	100%
Standard Oil Co. of N. J.....			5	100%

3. The officials of the Company familiar with the above listed exchanges and purchases are Mr. Charles E. Foster, Cities Service Oil Company, 70 Pine Street, New York, N. Y., and Mr. Joseph A. Kelley, Cities Service Oil Company, 260 Tremont Street, Boston, Massachusetts. Any inquiry in the first instance should be addressed to Mr. Foster.

CITIES SERVICE OIL COMPANY (DELAWARE)¹

QUESTIONS PROPOUNDED BY MR. THURMAN ARNOLD, ASSISTANT ATTORNEY GENERAL, IN HIS LETTER DATED NOVEMBER 10, 1938, REQUESTING CERTAIN INFORMATION REGARDING EXCHANGES AND PURCHASES OF MOTOR FUEL, FOR THE TEMPORARY NATIONAL ECONOMIC COMMITTEE

Q. 1. Did the Cities Service Company and its domestic subsidiaries, in the years, 1935, 1936 and 1937 engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

¹ On July 31, 1937, Empire Oil & Refining Company and its subsidiary, Cities Service Oil Company (Delaware) merged and became Cities Service Oil Company (Delaware). The data furnished is for the present company since July 31, 1937, and for the predecessor-constituent companies prior to that date.

Ans. Cities Service Oil Company (Delaware) and its predecessor-constituent companies engaged in such exchanges.

If so:

- (a) With what companies were such exchanges carried on?
 (b) What quantities (in barrels) were exchanged with each company during each of the years indicated?

Ans. See Schedule next following:

Motor fuel exchanged with other companies marketing branded motor fuel

1935:	Barrels received
Continental Oil Co.....	3, 708
Gulf Refining Co.....	23, 579
Mid-Continent Petr. Corp.....	87, 240
Sinclair Refining Co.....	39, 630
Socony-Vacuum Oil Co.....	331, 150
Wadhams Oil Co.....	176, 979
Total 1935.....	662, 286

1936:	
Gulf Refining Co.....	223, 207
Mid-Continent Petr. Corp.....	143, 727
Phillips Petr. Co.....	222, 351
Sinclair Refining Co.....	43, 969
Socony-Vacuum Oil Co.....	96, 874
Theisen-Clemens Co.....	8, 372
Wadhams Oil Co.....	252, 399
Total 1936.....	990, 899

1937:	
Gulf Refining Co.....	385, 985
Mid-Continent Petr. Corp.....	143, 455
Ohio Oil Co.....	3, 419
Phillips Petroleum Co.....	363, 320
Pure Oil Co.....	86, 354
Sinclair Refining Co.....	100, 090
Skelly Oil Co.....	3, 911
Theisen-Clemens Co.....	25, 748
Wadhams Oil Co.....	290, 498
Total 1937.....	1, 402, 780

(c) What percentage of the motor fuel received on such exchanges was sold under the brands of the Cities Service Oil Company (Delaware)?

Ans. The percentage of motor fuel received on such exchanges and sold as Housebrand (i. e., our trademark brand "Koolmotor" which is featured by us and in our advertising) was as follows:

1935.....	47. 5%
1936.....	81. 3%
1937.....	89. 5%

Including Ethyl and third grade gasoline which is sold by us under the names of Cities Service Ethyl and Cities Service Motor, but which is not featured by us to any extent comparable to our Housebrand "Koolmotor," as being sold under the brands of our company, the percentages were approximately as follows:

1935.....	60. 6%
1936.....	88. 6%
1937.....	99. 0%

Q. 2. Did the Cities Service Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Ans. Cities Service Oil Company (Delaware) and its predecessor-constituent companies made such purchases.

If so:

(a) From what companies were such purchases made?

(b) What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

Ans. The following tabulation does not include purchases of Ethyl gasoline made from companies marketing under their own brand, received at bulk plants into tank wagons. Such purchases were numerous but in small quantities. It is difficult, if not impossible, to trace all such transactions through our records. It is estimated with reasonable accuracy that such purchases amount to approximately 30,000 barrels for each of the years 1935, 1936 and 1937. All was resold under our brands.

See Schedule next following.

Motor fuel purchased for resale under our brands from other companies marketing branded motor fuel

1935		Barrels
Purchased from—		
Ashland Oil Co.....		195
Bell Oil & Gas Co.....		950
Col-Tex Refining Co.....		6,800
Crew Levick Company.....		61,986
Danciger Oil & Refineries, Inc.....		391
East Texas Refining Co.....		2,850
Highland Oil Co.....		5,182
Louisiana Oil Refining Co.....		10,180
Ohio Oil Co.....		47,637
Panhandle Refining Co.....		827
Rock Island Refining Co.....		4,027
Shell Petroleum Corp.....		1,206
Simms Oil Co.....		4,613
Socony Vacuum Oil Co.....		489
Taxman Refining Co.....		2,867
Texas Company, The.....		1,355
Texas Pacific Coal & Oil Co.....		6,453
Theisen Clemens Co.....		1,171
Waggoner Refining Co.....		2,147
Total.....		<u>161,326</u>

1936		
Purchased from—		
Ashland Oil Co.....		2,336
Atlantic Refining Co.....		1,960
Barnsdall Refining Corp.....		523
Cosco Oil Co.....		4,187
Cosden Oil Co.....		1,340
Crew Levick Co.....		2,214
Highland Oil Co.....		14,129
Louisiana Oil Refining Co.....		21,357
Magnolia Petroleum Co.....		192
Mid-Continent Petroleum Corp.....		5,797
Ohio Oil Co.....		19,826
Panhandle Refining Co.....		490
Rock Island Refining Co.....		21,930
Shamrock Oil & Gas Corp.....		1,731
Shell Petroleum Corp.....		955
Sinclair Refining Co.....		1,381
Socony Vacuum Oil Co.....		731
H. F. Wilcox Oil & Gas Co.....		1,884
Total.....		<u>102,963</u>

Motor fuel purchased for resale under our brands from other companies marketing branded motor fuel—Continued

1937		Barrels
Purchased from—		
Ashland Oil Co.....		2, 830
Arkansas Fuel Oil Co.....		33, 902
Bell Oil & Gas Co.....		426
Cosden Oil Co.....		2, 494
Mid-Continent Petroleum Corp.....		1, 727
Ohio Oil Co.....		1, 360
Rock Island Refining Co.....		19, 884
Shamrock Oil & Gas Co.....		384
Sinclair Refining Co.....		433
Total.....		<u>63, 440</u>

(c) What percentage of motor fuel so purchased was sold under the brands of the Cities Service Oil Company (Delaware)?

Ans. The percentage of motor fuel so purchased and sold as Housebrand (i. e., our trademark brand "Koolmotor" which is featured by us and in our advertising) was as follows:

1935.....	21. 7%
1936.....	34. 2%
1937.....	62. 3%

Including Ethyl and third grade gasoline which is sold by us under the name of Cities Service Ethyl and Cities Service Motor, but which is not featured by us to any extent comparable to our Housebrand "Koolmotor", as being sold under the brands of our company, the percentages were approximately as follows:

1935.....	100%
1936.....	100%
1937.....	100%

Q. 3. The name and address of the official of the company conversant with such motor fuel exchanges and purchases?

Ans. Mr. O. J. Tuttle, Cities Service Oil Company (Delaware), 919 North Michigan Avenue, Chicago, Illinois.

DAVID PROCTOR
Secretary

GULF OIL CORPORATION,
GULF BUILDING,
Pittsburgh, Pa., December 20, 1938.

The ATTORNEY GENERAL,
Department of Justice, Washington, D. C.

DEAR SIR: Your letter of November 10, 1938, bearing the initials "HBC" and the number "60-57-M", addressed to Gulf Oil Corporation at Pittsburgh, has been referred to me for reply.

We have not completed the compilation of all of the information necessary to answer all of the questions in your letter. However, it seems preferable to answer some of the questions now and the balance of them as promptly as the further necessary figures are obtained.

Question No. 1; Did the Gulf Oil Corporation and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer: Yes, Gulf Oil Corporation and its subsidiary, Gulf Refining Company, made such exchanges, but no other subsidiary did so.

Question No. 1 (a); With what companies were such exchanges carried on?

Answer: Sun Oil Company
Arkansas Fuel Oil Company
Colonial Beacon Oil Company
Orange State Oil Company
Shaw Brothers
The Texas Company
Tidewater Oil Company

	[42 gal. bbls.]		[42 gal. bbls.]
(S. O. Ind.)-----	{	Pure-----	{
	60, 490		179, 071
	759, 568		216, 414
	784, 057		226, 735
	168, 826		0
	654, 763		51, 356
	1, 021, 688		10, 718
	105, 973		0
	61, 958	Cit. S.-----	0
	131, 134		7, 967
	52, 812		0
	76, 752		14
	84, 337	(N. J.)-----	0
	0		0
	27, 434		820
	107, 609		0
	67, 083		0
Other-----	{		0
	274, 396		95
	444, 942		31
	1, 090, 157		0
	1, 491, 513		66
	1, 253, 671	(Indep.)-----	0
	0		0
	35, 212		10
	197, 769		0
	0		0
	17, 889		15
	166, 180		0
	204, 117		0
	235, 402	Cit. Ser-----	3, 570
(N. J.)-----	{		0
	251, 018		779
	60, 072	(Indep.)-----	38, 307
	89, 276		68, 305
	98, 134		

Valvoline Oil Company
Warner-Quinlan Oil Company
Ashland Oil and Refining Company
National Refining Company
Standard Oil Company of Ohio
Standard Oil Company of Kentucky
Standard Oil Company of Pennsylvania
Shell Petroleum Corporation
Pan-American Petroleum Corporation
Cities Service Oil Company
Republic Oil Refining Company
Phillips Petroleum Company
American Oil Company
Humble Oil and Refining Company
Continental Oil Company
Sinclair Refining Company
Aetna Oil Service
Campbell Oil
Mid-Continent Petroleum Company
Pure Oil Company
Socony Vacuum Oil Company
Magnolia Petroleum Company

It is possible that some of the companies named do not market motor fuel under their own trade brands. As to that, we cannot answer with certainty.

Question No. 1 (b): What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer: The quantities with respect to each company as shown by our records, are set out below, all quantities being expressed in gallons because they are so shown in our records.

[Boxhead and figures in italic are handwritten]

Name of Company	Year	Quantity Delivered To	Quantity Received From	42-gal. bbls.
Pure Oil Company.....	1935	30, 215, 817	36, 686, 870	<i>878, 497</i>
	1936	75, 923, 397	73, 034, 447	<i>1, 738, 915</i>
	1937	85, 334, 686	81, 877, 847	<i>1, 949, 472</i>
				<i>4, 561, 884</i>
Shell Petroleum Corporation.....	1935	5, 787, 217	2, 540, 587	
	1936	23, 921, 303	31, 901, 876	
	1937	39, 364, 666	32, 930, 410	
Pan-American Petroleum Corp.....	1935	6, 211, 421	7, 090, 720	
	1936	24, 858, 801	27, 500, 043	
	1937	45, 926, 271	42, 910, 888	
Republic Oil Refining Co.....	1935	2, 514, 225	4, 450, 857	
	1936	4, 355, 019	2, 602, 229	
	1937	6, 080, 575	5, 507, 643	
Standard Oil Co. of Ky.....	1935	2, 558, 692	2, 218, 123	
	1936	3, 739, 941	3, 223, 626	
	1937	3, 119, 477	3, 542, 145	
Sinclair Refining Company.....	1935	0	0	
	1936	1, 152, 246	1, 152, 246	
	1937	4, 629, 143	4, 519, 574	
Cities Service Oil Company.....	1935	1, 154, 251	2, 817, 482	
	1936	9, 789, 562	11, 524, 660	
	1937	15, 795, 046	18, 687, 575	
Socony Vacuum Oil Co.....	1935	45, 281, 270	45, 786, 590	
	1936	59, 418, 740	62, 643, 549	
	1937	64, 742, 065	52, 654, 190	
Sun Oil Company.....	1935	0	0	
	1936	465, 386	1, 478, 895	
	1937	8, 966, 152	8, 306, 302	
Phillips Petroleum Company.....	1935	0	0	
	1936	962, 906	751, 338	
	1937	9, 252, 702	6, 979, 549	
Humble Oil & Refining Co.....	1935	8, 660, 245	8, 572, 931	
	1936	9, 707, 490	9, 886, 902	
	1937	10, 957, 403	10, 542, 755	
Continental Oil Company.....	1935	2, 473, 341	2, 523, 006	
	1936	3, 803, 391	3, 749, 572	
	1937	4, 021, 753	4, 121, 625	
Magnolia Petroleum Company.....	1935	8, 049, 138	7, 520, 971	
	1936	8, 560, 481	9, 089, 390	
	1937	9, 535, 100	9, 522, 859	
American Oil Company.....	1935	635, 320	0	
	1936	1, 972, 404	2, 156, 967	
	1937	0	450, 171	
Arkansas Fuel Oil Company.....	1935	0	0	
	1936	0	0	
	1937	334, 619	334, 619	
Colonial Beacon Oil Company.....	1935	0	0	
	1936	600	600	
	1937	0	0	
Orange State Oil Company.....	1935	0	0	
	1936	34, 569	34, 432	
	1937	0	0	
Shaw Brothers.....	1935	0	0	
	1936	3, 975	3, 975	
	1937	1, 300	1, 300	
The Texas Company.....	1935	0	0	
	1936	2, 773	2, 773	
	1937	0	0	
Tidewater Oil Company.....	1935	0	0	
	1936	400	400	
	1937	0	0	
Valvoline Oil Company.....	1935	0	0	
	1936	620	620	
	1937	0	0	
Warner-Quinlan Oil Co.....	1935	149, 960	0	
	1936	0	149, 960	
	1937	0	0	
Ashland Oil & Refining Co.....	1935	32, 709	32, 714	
	1936	533, 765	1, 608, 893	
	1937	2, 847, 089	2, 868, 799	
Standard Oil Co. of Ohio.....	1935	0	0	
	1936	0	0	
	1937	1, 570, 418	1, 529, 646	<i>756, 420</i>
Standard Oil Co. of Penna.....	1935	0	0	
	1936	1, 429, 400	1, 419, 133	<i>53, 789</i>
	1937	0	0	
National Refining Company.....	1935	0	0	
	1936	0	0	
	1937	4, 172, 964	2, 790, 009	<i>66, 429</i>

[Boxhead and figures in italic are handwritten]

Name of Company	Year	Quantity Delivered To	Quantity Received From	<i>42-gal. bbls.</i>
Aetna Oil Service.....	1935	0	0	
	1936	1, 205	1, 205	<i>29</i>
	1937	241, 136	241, 136	<i>5,741</i>
Campbell Oil.....	1935	0	308	<i>7</i>
	1936	308	0	
	1937	0	0	
Mid-Continent Petroleum Co.....	1935	0	0	
	1936	0	0	
	1937	4, 200	4, 200	<i>100</i>

Question No. 1 (c): What percentage of the motor fuel received on such exchanges was sold under brands of the Gulf Oil Corporation?

Answer: It is impossible to answer this question with exactness, but the great majority of it was so sold.

The agreements under which all of these exchanges were made (except the emergency exchanges, resulting from temporary local shortages, involving a relatively very small total quantity) required that the several grades of gasoline delivered to the Gulf Companies thereunder must conform to the Gulf Companies' current specifications for the respective grades. We trust you will not overlook that fact in preparing your study to be submitted to the Temporary National Economic Committee.

We expect to be able to answer the remaining questions in your letter of November 10th shortly after the Holidays.

Very truly yours,

DAVID PROCTOR.

DP:S

GULF OIL CORPORATION,
GULF BUILDING,
Pittsburgh, Pa., February 11, 1939.

The ATTORNEY GENERAL,
Department of Justice, Washington, D. C.

DEAR SIR: As promised in my letter to you of December 20, 1938, I am giving you below the answers to the questions in your letter of November 10, 1938, addressed to Gulf Oil Corporation, bearing the initials "HBC" and the number "60-57-M", which were not answered in my letter of December 20th.

Question No. 2: Did the Gulf Oil Corporation and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Answer: Yes; Gulf Oil Corporation and its subsidiaries, Gulf Refining Company, a Texas Corporation, and Gulf Refining Company, a Delaware Corporation, made such purchases, but no other subsidiary did so.

Question No. 2(a): From what companies were such purchases made?

Question No. 2(b): What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

Answer to Questions 2(a) and 2(b): The name of each Company from which such purchases were made and the quantities purchased from each during each year, as shown by our records, are set out below, all quantities being expressed in gallons because they are so shown in our records.

Name of Company	Year	Quantity Pur- chased	Name of Company	Year	Quantity Pur- chased
American Refining Co.....	1935	0	Gainessville Refining Corpora- tion.....	1935	0
	1936	0		1936	0
	1937	6, 226		1937	79, 243
Ashland Refining Co.....	1935	406, 848	General American Oil Co.....	1935	0
	1936	0		1936	32, 080
	1937	0		1937	48, 345
Atlantic Refining Co.....	1935	128	Gilliland Refining Co.....	1935	1, 445, 831
	1936	1, 016		1936	161, 587
	1937	0		1937	0
Atlas Oil Co.....	1935	0	Goodrich Oil Products.....	1935	0
	1936	810, 174		1936	16, 743
	1937	825, 374		1937	0
Bell Oil & Gas Co.....	1935	40, 309	Howard County Refining Co.....	1935	0
	1936	530, 257		1936	0
	1937	393, 284		1937	208, 243
Bennett Refining Co.....	1935	37, 359	Humble Oil Co.....	1935	1, 008
	1936	50, 180		1936	0
	1937	0		1937	4, 985
Bradford Oil Refining Co.....	1935	8, 302	Hurricane Petroleum Co.....	1935	95, 765
	1936	0		1936	446, 269
	1937	0		1937	688, 240
Bradford Penn Ref. Corpora- tion.....	1935	16, 376	Indian Refining Co.....	1935	0
	1936	0		1936	0
	1937	0		1937	10, 607
Carnick Oil Sales.....	1935	7, 558	James B. Berry Sons Co.....	1935	80, 618
	1936	0		1936	1, 503, 551
	1937	0		1937	2, 555, 583
Cascade Refining Co.....	1935	0	Johnson Oil Refining Co.....	1935	0
	1936	40, 447		1936	596
	1937	16, 208		1937	2, 477
Central Service Co.....	1935	0	Kilgore Refining Co.....	1935	0
	1936	0		1936	39, 874
	1937	10, 182		1937	24, 196
Century Refining Co.....	1935	21, 368	Kraco Refining Co.....	1935	0
	1936	0		1936	0
	1937	0		1937	39, 646
Chalmette Petroleum Co.....	1935	0	Lion Oil Co.....	1935	0
	1936	0		1936	315, 872
	1937	123, 751		1937	0
Chief Refining Co.....	1935	8, 048	Louisiana Oil Refining Co.....	1935	6, 774, 669
	1936	0		1936	777, 346
	1937	0		1937	0
Circle Service.....	1935	0	Louisville Refining Co.....	1935	0
	1936	0		1936	0
	1937	1, 924		1937	1, 528
Coleman Ref. Corporation.....	1935	0	Magnolia Petroleum Co.....	1935	0
	1936	0		1936	2, 078
	1937	48, 378		1937	23, 903
Columbia Refining Co.....	1935	0	Marania Oil Co.....	1935	3, 166
	1936	0		1936	0
	1937	237, 746		1937	0
Conoco Oil Co.....	1935	0	McMurrey Refining Co.....	1935	119, 197
	1936	0		1936	154, 608
	1937	101, 551		1937	321, 466
Continental Oil Co.....	1935	20, 671	Minimax Gas Co.....	1935	110
	1936	46, 302		1936	0
	1937	8, 338		1937	0
Cumberland River Oil Co.....	1935	0	Morris Gas Stations.....	1935	0
	1936	0		1936	0
	1937	1, 546		1937	2, 055
Danciger Oil & Ref. Co.....	1935	0	Moutra Oil Co.....	1935	0
	1936	39, 929		1936	0
	1937	40, 418		1937	353, 602
Daugherty Refinery.....	1935	66, 020	Octane Oil Co.....	1935	0
	1936	41, 001		1936	0
	1937	0		1937	303, 892
Diamond State Petroleum Co.....	1935	0	Oil Refineries, Inc.....	1935	8, 105
	1936	5, 617		1936	420
	1937	0		1937	0
Eastern States Petroleum Co., Inc.....	1935	0	Onyx Refining Corporation.....	1935	0
	1936	0		1936	0
	1937	7, 803, 141		1937	1, 074, 445
East Texas Refining Co.....	1935	1, 643, 076	Panhandle Refining Co.....	1935	1, 593, 005
	1936	1, 676, 456		1936	40, 756
	1937	1, 896, 404		1937	158, 914
Elk Refining Co.....	1935	97, 508	Pennsylvania Oil Products Re- fining Co.....	1935	32, 790
	1936	40, 762		1936	0
	1937	8, 624		1937	0

Name of Company	Year	Quantity Pur- chased	Name of Company	Year	Quantity Pur- chased
Penn Refining Co.....	1935	48,455	Texover Refining Co.....	1935	23,736
	1936	7,975		1936	3,361
	1937	0		1937	0
Pettus Oil & Refining Co.....	1935	0	The American Oil Co.....	1935	0
	1936	385,572		1936	2,083
	1937	346,152		1937	0
Phillips Petroleum Co.....	1935	0	The Nola Oil Co., Inc.....	1935	4,189
	1936	7,845		1936	0
	1937	151,901		1937	0
Premier Oil Refining Co.....	1935	15,991	The Ohio Oil Co.....	1935	0
	1936	63,325		1936	0
	1937	0		1937	730,505
Pure Oil Co.....	1935	0	The Refugio Refinery.....	1935	160,699
	1936	165		1936	176,794
	1937	7,672,730		1937	8,015
Republie Oil Co.....	1935	0	The Texas Company.....	1935	1,304,335
	1936	0		1936	0
	1937	1,160		1937	169,977
Rodessa Oil & Ref. Corp.....	1935	0	Tidewater Associated Oil Co.....	1935	0
	1936	80,056		1936	0
	1937	0		1937	17,276
Root Petroleum Co.....	1935	8,253,142	Tower Refining Co.....	1935	0
	1936	5,784,725		1936	506,171
	1937	5,019,572		1937	129,682
Shell Petroleum Corporation.....	1935	0	Trossier Oil Co.....	1935	0
	1936	10,366		1936	0
	1937	0		1937	2,130
Simms Oil Co.....	1935	99,073	Trinity Refining Co.....	1935	0
	1936	0		1936	472,532
	1937	0		1937	0
Sinclair Refining Co.....	1935	0	Trio Refining Corporation.....	1935	23,897
	1936	1,687		1936	0
	1937	4,218,975		1937	0
Socony-Vacuum Oil Co.....	1935	0	Tyreco Refining Co. #2.....	1935	112,767
	1936	1,890		1936	80,984
	1937	0		1937	0
Southport Petroleum Co.....	1935	0	Ultra-Penn Refining Co.....	1935	24,500
	1936	0		1936	8,148
	1937	2,911,957		1937	0
Sparton Oil Corp.....	1935	80,901	United Refining Co.....	1935	138
	1936	81,876		1936	0
	1937	0		1937	0
Standard Oil Co. of Ky.....	1935	0	Valvoline Oil Co.....	1935	24,669
	1936	0		1936	8,071
	1937	122,826		1937	16,468
Standard Oil Co. of N. Jersey.....	1935	0	Wabash Oil Corporation.....	1935	0
	1936	0		1936	0
	1937	863		1937	32,486
Standard Oil Co. of New York.....	1935	275	Western Refining Co.....	1935	0
	1936	385		1936	0
	1937	0		1937	40,028
Standard Oil Co. of Ohio.....	1935	0	West Texas Refining Co.....	1935	0
	1936	0		1936	0
	1937	438		1937	48,177
Standard Oil Co. of Texas.....	1935	0	White Lily Oil Co.....	1935	0
	1936	301,013		1936	16,440
	1937	1,136,522		1937	3,316
Sterling Oil Co.....	1935	0	Wickett Refining Co.....	1935	0
	1936	750		1936	0
	1937	0		1937	160,943
Superior Oil Works.....	1935	8,148	Wofford Oil Co.....	1935	0
	1936	0		1936	148
	1937	0		1937	825
Taylor Refining Co.....	1935	0	Wolvering-Empire Refining Co.....	1935	30,951
	1936	302,340		1936	8,050
	1937	0		1937	0
Texas Oil Products Co.....	1935	878,068	Wood-Moore Corporation.....	1935	0
	1936	0		1936	856,481
	1937	0		1937	902,718
Texas Pacific Coal & Oil Co.....	1935	0			
	1936	2,418			
	1937	0			

Question No. 2 (c): What percentage of motor fuel so purchased was sold under the brands of the Gulf Oil Corporation?

Answer: It is impossible to answer this question with exactness. A very large proportion was sold under the brands of Gulf Oil Corporation or its two subsidiaries named above. In each of these purchases (except a few emergency purchases resulting from temporary shortages in certain localities, and involving

a relatively small total quantity) the purchase orders required that the several grades of gasoline delivered to the Gulf Companies thereunder must conform to the Gulf Companies' current specifications for the respective grades.

Question No. 3: The name and address of the official of the Gulf Oil Corporation conversant with such motor fuel exchanges and purchases.

Answer: As to exchanges, Mr. W. M. McEldowney, P. O. Box 1166, Pittsburgh, Pa.

As to the purchases, Mr. H. C. Meyer, P. O. Box 1166, Pittsburgh, Pa.

Very truly yours,

DAVID PROCTOR, *Secretary.*

DP: S

THE OHIO OIL CO.,
Findlay, Ohio, April 22, 1939.

Re: Your HBC—60-57-M.

THE ATTORNEY GENERAL,
Department of Justice,
Washington, D. C.

SIR: This will acknowledge receipt of your inquiry of November 10, 1938 addressed to The Ohio Oil Company, relative exchanges and purchases of motor fuel by this Company during the years 1935, 1936 and 1937.

The questions you set forth in your letter of November 10, 1938, are answered below, or the information requested is contained in schedules referred to below and attached hereto:

1. Did the Ohio Oil Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Yes.

(a) With what companies were such exchanges carried on?

See Schedule 1. (a), attached hereto.

(b) What quantities (in barrels) were exchanged with each company during each of the years indicated?

See Schedule 1. (b), attached hereto.

(c) What percentage of the motor fuel received on such exchanges was sold under the brands of the Ohio Oil Company?

48.43%.

2. Did the Ohio Oil Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Yes.

(a) From what companies were such purchases made?

See Schedule 2. (a) and 2. (b), attached hereto.

(b) What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

See Schedule 2. (a) and 2. (b), attached hereto.

(c) What percentage of motor fuel so purchased was sold under the brands of the Ohio Oil Company?

100%.

3. The name and address of the official of the Ohio Oil Company conversant with such motor fuel exchanges and purchases.

Mr. C. L. Fleming, Vice President, The Ohio Oil Company, Findlay, Ohio

Trusting that the foregoing complies with your request, I remain,

Very truly yours,

C. L. FLEMING,
Vice President.

CLF/JC

Schedule 1. (a)

Companies:	Period
Standard Oil Company (Indiana)---	January, 1935-September, 1935, incl.
Sinclair Refining Company-----	May, 1935-December, 1936, incl.
Socony-Vacuum Oil Company	September, 1935-December, 1937, incl.
(Lubrite Division).	
Socony-Vacuum Oil Company	June, 1937-December, 1937, incl.
(White Star Division).	
National Refining Company-----	July, 1935-November, 1935, incl.
	May, 1937-December, 1937, incl.
Aetna Oil Service, Inc. (Louisville)-	January, 1937-April, 1937, incl.

Schedule 1. (b)

Companies	1935		1936		1937		Total	
	Re- ceived	De- livered	Re- ceived	De- livered	Re- ceived	De- livered	Re- ceived	De- livered
	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>
Standard Oil Company (Indiana)---	120,799	120,783					120,799	120,783
Sinclair Refining Company-----	194,426	200,955	400,287	383,480	405,359	429,729	1,000,072	1,014,164
Socony-Vacuum Oil Company								
(Lubrite Division)-----	35,861	40,655	200,522	198,960	244,098	282,288	480,481	521,903
Socony-Vacuum Oil Company								
(White Star Division)-----					13,965	3,450	13,965	3,450
National Refining Company-----	33,896	33,904			106,573	103,686	140,469	137,590
Aetna Oil Service, Inc. (Louisville)-----								
					6,747	6,747	6,747	6,747
Total-----	384,982	396,297	600,809	582,440	776,742	825,900	1,762,533	1,804,637

NOTE.—United States Barrels of 42 gallons.

Schedule 2. (a) and 2. (b)

Companies	Quantities			
	1935	1936	1937	Total
	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>
Aetna Oil Service, Inc., Louisville, Ky.-----	81,933	68,566	118,333	268,832
Ashland Refining Co., Ashland, Ky.-----		11,271	29,524	40,795
Alco Refining Co., Canton, Ohio-----			52,591	52,591
National Refining Co., Cleveland, Ohio-----			11,736	11,736
Virginia Gasoline & Oil Co., Charleston, West Va-----			577	577
Standard Oil Co. (Kentucky), Latonia, Ky.-----			318	318
Barnsdale Refining Co., Tulsa, Okla.-----	3,499	4,886	2,980	11,365
Bell Oil & Gas Co., Tulsa, Okla.-----	15,693	6,368	33,844	55,905
Black Gold Refining Co., Oklahoma City, Okla.-----	6,503	4,603	5,127	16,233
Empire Refining Company, Bartlesville, Okla.-----	3,582	196	3,066	6,844
Lion Oil Refining Co., El Dorado, Ark.-----	124,826			124,826
Lion Oil Sales Co., El Dorado, Ark.-----	1,978			1,978
Radio Petroleum Co., Ft. Worth, Texas-----	4,946			4,946
Rock Island Refining Co., Duncan, Okla.-----	22,111	5,828	6,371	34,310
Sinclair Refining Co., Ft. Worth, Texas-----	14,099	6,680	4,478	25,257
Texas Pacific Coal & Oil Co., Ft. Worth, Texas-----	13,761	5	2,892	16,658
Tidewater Oil Co., Tulsa, Okla.-----	2,197			2,197
Western Oil & Fuel Co., Minneapolis, Minn-----	3,545			3,545
Gulf Refining Co., Houston, Texas-----	384	3,037	3,661	7,082
Cities Service Oil Co., Tulsa, Okla.-----	551	232		783
Magnolia Petroleum Co., Dallas, Texas-----	744			744
Phillips Petroleum Co., Bartlesville, Okla.-----	191	131		322
El Dorado Refining Co., El Dorado, Kansas-----		9,203	21,973	31,176
Col Tex Refining Co., Oklahoma City, Okla.-----			2,341	2,341
Continental Oil Co., Ponca City, Okla.-----			1,480	1,480
Hurricane Petroleum Co., Shreveport, La-----	377		11,664	12,041
H. F. Wilcox Oil & Gas Co., Tulsa, Okla.-----			3,406	3,406
Sub Total-----	300,920	121,006	316,362	738,288
Small Miscellaneous Purchases-----	3,780	3,155	1,050	7,985
Grand Total-----	304,700	124,161	317,412	746,273

NOTE.—1. United States barrels of 42 gallons.

2. The addresses shown above may not be home office address in all cases.

3. We do not know as to whether or not these companies market "Branded Fuel."

DON EMERY,
Vice President and General Counsel

PHILLIPS PETROLEUM COMPANY,
Bartlesville, Oklahoma, December 2, 1938.

Hon. THURMAN ARNOLD,
Assistant Attorney General, Washington, D. C.

DEAR SIR: I submit herewith the information requested in your letter of November 10, 1938, with respect to the exchanges and purchases of gasoline by Phillips Petroleum Company during the years 1935, 1936 and 1937. For convenience, I set out below the questions propounded by you, together with the answers thereto.

Q. 1. Did the Phillips Petroleum Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

If so:

- (a) With what companies were such exchanges carried on?
- (b) What quantities (in barrels) were exchanged with each company during each of the years indicated?
- (c) What percentage of the motor fuel received on such exchanges was sold under the brands of the Phillips Petroleum Company?

A. 1. Yes.

(a) The exchanges were made with the Cities Service Oil Company (formerly Empire Oil & Refining Company), Tulsa, Oklahoma, and The Gulf Oil Corporation, Pittsburgh, Pennsylvania.

(b) Schedules are attached giving the details requested with respect to the exchanges with each of the above named companies. These schedules give the full amount of exchanges between these companies, but the greater part of this volume is not really required by the terms of your question, in view of the fact that you request the amount of exchanges "requiring no further processing or blending for consumer distribution." The gasoline furnished by Phillips to the Cities Service Company and the Gulf Company required no further processing on their part insofar as we know. On the other hand, practically all of the gasoline furnished by these companies to Phillips on these exchanges was further blended with natural gasoline furnished by Phillips (such natural gasoline being no part of the exchange) before being resold to the consumer. The only exceptions were the gasoline furnished by the Gulf at Toledo during the months of April, May and June, 1937, and at Sweetwater, Texas, during the year 1937. The gasoline received on these two exchanges was sold without further processing.

(c) Practically all of the gasoline received by Phillips under these exchanges was sold under the Phillips brand.

Q. 2. Did the Phillips Petroleum Company and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

If so:

- (a) From what companies were such purchases made?
- (b) What quantities (in barrels) were purchased from each of the companies during each of the years indicated?
- (c) What percentage of motor fuel so purchased was sold under the brands of the Phillips Petroleum Company?

A. 2. Yes.

(a) and (b). Attached hereto is a schedule showing the purchases by Phillips from other companies, together with the quantities, during each of the years 1935, 1936 and 1937. This schedule includes all purchases by Phillips in tank car lots. It may be that by the term "companies marketing branded motor fuel" you meant *major companies* marketing major brands but nevertheless we have included purchases from all companies. None of these companies, except Sinclair, is a major company or has a nationally advertised brand of gasoline. We understand, however, that practically all of these companies except the brokers named below do have a brand for their motor fuel, advertised and marketed, in a relatively small territory. The

selling companies listed, with the exception of Sinclair Refining Company, a major company, and Dale W. Moore Oil Company, L. O. Carter Company, Inc., Tansel Petroleum Company, and Petroleum Exchange Corporation, brokers, are all what is known as independent refiners.

(c) Practically all of the gasoline received by Phillips under these exchanges was sold under the Phillips brands.

Q. 3. The name and address of the official of the Phillips Petroleum Company conversant with such motor fuel exchanges and purchases.

A. 3. Mr. M. E. Foster, Co-Ordinator, is conversant with the facts relating to exchanges, and Mr. Fred L. Koopman with relation to purchases. Both are located at Bartlesville, Oklahoma.

Please address to the undersigned future communications about this matter.

Very truly yours

DON EMERY.

Encls.

[In barrels]

Phillips-Empire exchange	House-brand	3rd grade	Total
(A) Phillips Shipments to Empire:			
From E. St. Louis, Ill.:			
Year 1936 (April to Dec. Incl.)	177, 104	4, 597	181, 701
Year 1937	280, 790		280, 790
	457, 894	4, 597	462, 491
From Kansas City, Kansas:			
Year 1936 (April to Dec. Incl.)	38, 730	1, 143	39, 873
Year 1937	47, 607	194	47, 801
	86, 337	1, 337	87, 674
From Borger, Texas:			
Year 1936 (December Only)	778	392	1, 170
Year 1937	14, 903	19, 431	34, 334
	15, 681	19, 823	35, 504
Total:			
Year 1936	216, 613	6, 132	222, 745
Year 1937	343, 300	19, 626	362, 926
	559, 913	25, 758	585, 671
(B) Empire Shipments to Phillips:			
From E. Chicago, Ind. (Motor Fuel):			
Year 1936	313, 225	7, 404	320, 629
Year 1937	449, 868	26, 429	476, 297
	763, 093	33, 833	796, 926
Less: Natural furnished by Phillips:			
Year 1936	83, 360		83, 360
Year 1937	131, 605		131, 605
	214, 965		214, 965
Net Gasoline Exchanged:			
Year 1936	229, 865	7, 404	237, 269
Year 1937	318, 203	26, 429	344, 692
	548, 128	33, 833	581, 961
Phillips-Gulf exchange	House-brand	3rd grade	Total
(A) Phillips Shipments to Gulf:			
From E. St. Louis, Ill.:			
Year 1937	72, 173		72, 173
From Borger, Texas:			
Year 1937	51, 674	42, 433	94, 007
Total	123, 747	42, 433	166, 180

[In barrels]

Phillips-Gulf exchange	House-brand	3rd grade	Total
(B) Gulf Shipments to Phillips:			
From Toledo, Ohio:			
Year 1937.....	155,707	196	155,903
Less: Natural Furnished by Phillips.....	30,563		30,563
Net Gasoline Exchanged (Toledo)*			
Year 1937.....	125,144	196	125,340
From Sweetwater, Texas:			
Year 1937.....	64,589	44,834	109,423
Total.....	189,733	45,030	234,763

Months and volumes of motor fuel in barrels upon which no Natural Gasoline was furnished Gulf by Phillips for Blending, are as follows:

April 1937.....	22,385 barrels
May 1937.....	31,752 barrels
June 1937.....	17,477 barrels

Tank car purchases (does not include truck purchases)

[In terms of barrels]

(a & b)	1935		1936		1937	
	Regular	Thrd Grade	Regular	Third Grade	Regular	Third Grade
1. Champlin Refining Co.....	14,067	20,085				954
2. Cosden Oil Corporation.....	1,919					
3. Bell Oil & Gas Co.....		17,199		23,113		11,701
4. Black Gold Refining Co.....		4,236		1,158		
5. L. O. Carter Co., Inc.....		2,111				
6. Cushing Refining & Gasoline Co.....		11,193				
7. Danciger Refineries, Inc.....		2,116				
8. Dickey Refining Co.....		37,182		31,242		16,469
9. Eason Oil Co.....	774	14,395				5,075
10. Wirt Franklin Petroleum Co.....		1,344				
11. Kanotex Refining Co.....		2,135				
12. Major Petroleum Products Co.....		627				
13. Monarch Refining Co.....		3,391		15,605		
14. Dale W. Moore Oil Co.....		5,754				
15. Olney Oil & Refining Co.....		1,929		15,322		20,553
16. Omar Refining Co.....	1,338					
17. Panhandle Refining Co.....		22,102				
18. Rock Island Refining Co.....	12,477	1,929	6,542	2,105		
19. Shamrock Oil & Gas Co.....		1,938		8,014		
20. Simms Oil Co.....		4,822				
21. Tansel Petroleum Co.....		2,660				
22. Taxman Refining Co.....		59,745		108,691		72,924
23. Texas Pacific Coal & Oil Co.....		3,795				
24. Triangle Producing & Refining Co.....		4,257		6,176		
25. Vickers Petroleum Co.....		16,154				15,091
26. Waggoner Refining Co.....		947				963
27. H. F. Wilcox Oil & Gas Co.....		3,434				
28. Chase Refining Co.....				4,433		7,160
29. Cosco Oil Co.....				7,068		5,381
30. Cusco Oil & Refining Co.....				4,200		
31. Petroleum Exchange Corporation.....				962		
32. Sooner State Refining Co.....				585		
33. Western Refining Co.....				589		
34. East Texas Refining Co.....		1,892		1,905		
35. Octane Oil Refining Co.....		1,894				
36. Primrose Petroleum Co.....		762				
37. Bay Petroleum Co.....						10,831
38. Pyramid Producing & Refining Co.....						381
39. Derby Oil Co.....					1,824	
40. El Dorado Refining Co.....						956
41. Sinclair Refining Co.....		5,974	241			
	30,575	256,002	6,783	231,168	824	168,439

¹ Ethyl gasoline.

L. S. WESCOAT,
Vice President and Secretary

THE PURE OIL COMPANY

The Pure Oil Building, 35 East Wacker Drive

CHICAGO, February 25, 1939.

File: HBC-60-57-M

Mr. THURMAN ARNOLD,
Assistant Attorney General,
Department of Justice, Washington, D. C.

DEAR SIR: Answer to your letter of November 10, 1938 has been delayed by reason of the vast amount of detail necessary to compile the information which you request.

There is enclosed herewith statements outlining purchases and exchange of gasoline for the years 1935, 1936 and 1937, divided between companies, as requested.

We are unable to make a complete segregation between that gasoline which required processing or blending and that gasoline which required no further processing or blending. The treatment of gasoline, which has been purchased by the Company or obtained through exchange, is carried on at a large number of points in the field, and may consist of one or more of the following:

1. Reprocessing at refineries
2. Addition of tetraethyl lead to produce both regular and premium grades
3. Blending of different grades
4. Addition of solvent solution
5. Blending with natural gasoline
6. Addition of benzol

C. B. Watson, Vice President of the Company, whose address is 35 East Wacker Drive, Chicago, Illinois, is the official in charge of the departments through which these purchases and exchanges are made.

If there is any further information which you require, please advise.

Very truly yours,

L. S. WESCOAT.

Encl.

Pure Oil Company withdrawals of motor fuel from other companies on regular exchange and temporary loans years 1935, 1936, 1937
 (Subject to comments in The Pure Oil Company letter dated February 25, 1939)
 [In 42 gallon barrels]

Withdrawals made from	Source	Year 1935			Year 1936			Year 1937			Total	
		Exchange	Loan	Total	Exchange	Loan	Total	Exchange	Loan	Total	Exchange	Loan
Atlantic Refining Co.	Brunswick, Ga.	6,511		6,511	22,655		22,655	18,093		18,093	47,259	
	Richmond, Va.	17,280		17,280	25,048		25,048	54,844		54,844	97,172	
	Norfolk, Va.	11,838		11,838	25,858		25,858	10,657		10,657	48,353	
	Jacksonville, Fla.		681	681							681	
Continental Oil Co.		29,118	681	29,799	50,906		50,906	65,501		65,501	145,525	681
Total Continental												
Cities Service Oil Co.	East Chicago, Ind.							90,397		90,397		
	Wilmington, N. C.					2,539	2,539		1,639	1,639		4,178
Arkansas Fuel Oil Co. (Cit. Ser.)	Cattlettsburg, Ky.								2,245	2,245		2,245
	Wilmington, N. C.	68,728		68,728	108,461		108,461	127,690		127,690	304,888	
Ashland Refining Co. (Indep.)	Wilmington, N. C.		962	962	685		685				1,647	
	Moorhead City, N. C.											1,647
Gulf Oil Corporation	Richmond, Va.	300		300	3,467	2,492	5,959	10		10		
	Norfolk, Va.	386		386	3,264		3,264	5,248	8	5,256	9,105	
	Savannah, Ga.				6,720		6,720	9,700	8,555	18,255	15,350	2,500
	Jacksonville, Fla.							4,988	4,988	4,988	40,886	76
	Augusta, Ga.								76	76		76
	Miami, Fla.											1,693
	Tampa, Fla.	2,977		2,977								3,200
	Pensacola, Fla.	4,241		4,241					3,462	3,462	28,161	50
	Panama City, Fla.								50	50		50
	Mobile, Ala.		10,001	10,001				122,612		122,612	122,612	
	Port Arthur, Texas										10,001	
	Memphis, Tenn.	68,108		68,108	45,212		45,212	1,912		1,912		1,912
	Nashville, Tenn.	67,228		67,228	126,549		126,549	27,861		27,861	141,181	
	Carthage, Tenn.							122,417		122,417	316,194	
	Clarkesville, Tenn.	4,268		4,268				5,570		5,570	3,570	
	Chattanooga, Tenn.				13,548		13,548	144		144	17,960	
	Staten Island, N. Y.					60	60				60	
	Syracuse, N. Y.							197,499		197,499	197,499	
	Utica, N. Y.	1,717		1,717	80,554		80,554	120,433		120,433	302,704	
	Buffalo, N. Y.							102,363		102,363	102,363	
	Albany, N. Y.	8,914		8,914	9,458		9,458	9,569		9,569	27,941	
	Rochester, N. Y.							54		54	54	
	Girard Point, Pa.							20,120		20,120	20,120	
	Neville Island, Pa.				46,149		46,149	67,733		67,733	67,733	
								41,575		41,575	87,724	

Pure Oil Company withdrawals of motor fuel from other companies on regular exchange and temporary loans years 1935, 1936, 1937—Con.

[In 42 gallon barrels]

Withdrawals made from	Source	Year 1935			Year 1936			Year 1937			Total		
		Exchange	Loan	Total	Exchange	Loan	Total	Exchange	Loan	Total	Exchange	Loan	Total
Gulf Oil Corporation	W. Brownsville, Pa.	1,962		1,962	5,319		5,319				7,781		7,781
	Cabin Creek, W. Va.				47,944		47,944				47,944		47,944
	Charleston, W. Va.				2,070		2,070				2,070		2,070
	Huntington, W. Va.				53,294		53,294	90,783		90,783	144,077		144,077
	Parkersburg, W. Va.	8,311		8,311	28,304		28,304	46,562		46,562	83,177		83,177
	Wheeling, W. Va.	13,232		13,232	42,498		42,498				55,730		55,730
	Prestonsburg, Ky.								48	48			48
	Cincinnati, Ohio	180,079		180,079	291,211		291,211	298,479		298,479	769,769		769,769
	Portsmouth, Ohio				12,515		12,515				12,515		12,515
	Ripley, Ohio	3,432		3,432							3,432		3,432
	Marietta, Ohio	2,213		2,213	2,387		2,387				4,600		4,600
	Cleveland, Ohio								3,589	3,589			3,589
	Toledo, Ohio	243,096		243,096	797,662		797,662	530,170		530,170	1,570,928		1,570,928
	Bay City, Mich.							60,797		60,797			60,797
Total, Gulf Oil Corp.		673,025	46,397	719,423	1,723,051	84,650	1,807,701	2,014,538	17,241	2,031,779	4,501,012	154,711	4,655,723
Shell Petroleum Corp.	Savannah, Ga.	11,690		11,690	46,431		46,431	34,805		34,805	92,926		92,926
	Bay City, Mich.				20,726		20,726				20,726		20,726
	East Chicago, Ind.	412,756		412,756	412,544		412,544	338,727		338,727	1,164,027		1,164,027
	Westwego, La.	229,547		229,547	271,694		271,694	33,150		33,150	534,391		534,391
	Destrahan, La.							2,290		2,290			2,290
	Charleston, S. C.	68,508		68,508	180,549		180,549	224,047		224,047	473,104		473,104
	Savannah, Ga.	124,302		124,302	277,644		277,644	395,945		395,945	797,891		797,891
	Norfolk, Va.		5,088	5,088							5,088		5,088
	Tampa, Fla.		2,397	2,397					2,412	2,412		6,717	6,717
		835,113	7,485	842,598	1,163,157	1,908	1,165,065	994,139	2,412	996,571	2,992,429	11,805	3,004,234
Total, Sinclair Refining Co.													
Socony-Vacuum Oil Co.	Buffalo, N. Y.							786		786			786
	Ogdensburg, N. Y.				19,114		19,114	17,577		17,577	36,691		36,691
	Rochester, N. Y.				41,921		41,921	53,510		53,510	95,431		95,431
	Sacketts Harbor, N. Y.				14,268		14,268				14,268		14,268
	Paulsboro, N. J.				63,006		63,006	110,705		110,705	173,711		173,711
	Port Socony, N. Y.							14,263		14,263			14,263

Motor fuel purchased by Pure from companies selling a branded gasoline, years 1935, 1936, and 1937

(Subject to comments in The Pure Oil Company letter dated February 25, 1939.)

[In barrels]

Purchased From	Barrels Purchased		Barrels Sold		Further Process- ing or Blend- ing	Total Sales and Process- ing
	Un- branded	Branded	Un- branded	Branded		
Eason Oil Co.:						
1935.....	3,628	-----	3,251	377	-----	3,628
1936.....	32,879	-----	289	32,590	-----	32,879
1937.....	4,998	-----		4,998	-----	4,998
	41,505	-----	3,540	37,965	-----	41,505
Kanotex Refining Co.:						
1935.....	76	-----		769	-----	769
1936.....	1,025	-----	781	242	-----	1,023
1937.....	789	-----	415	374	-----	789
	2,581	-----	1,196	1,385	-----	2,581
Omar Refining Co.:						
1935.....	35,482	-----		35,482	-----	35,482
1936.....	50,028	-----		50,028	-----	50,028
1937.....	36,632	-----		36,632	-----	36,632
	122,142	-----		122,142	-----	122,142
Panhandle Refining Co., 1935.....	7,554	-----		7,554	-----	7,554
Vickers Petroleum Co., 1935.....	1,925	-----		1,925	-----	1,925
Waggoners Refining Co., 1935.....	4,164	-----		4,164	-----	4,164
H. F. Wilcox Oil & Gas Co.:						
1935.....	8,135	-----	193	7,942	-----	8,135
1936.....	10,669	-----		10,669	-----	10,669
	18,804	-----	193	18,611	-----	18,804
Atlas Oil Corp.:						
1935.....	58,111	-----		58,111	-----	58,111
1936.....	72,038	-----		72,038	-----	72,038
1937.....		-----			-----	
	130,149	-----		130,149	-----	130,149
Cushing Refining & Gaso. Co., 1936.....	58	-----	58		-----	58
Bell Oil & Gas Co., 1937.....	41,300	-----		41,300	-----	41,300
Danciger Oil Refg. Co.:						
1936.....	20,833	-----			20,833	20,833
1937.....	1,528	-----		1,528	-----	1,528
	22,361	-----		1,528	20,833	22,361
Johnson Oil Refg. Co., 1937.....	344	-----	344		-----	344
Rock Island Refg. Co., 1937.....	2,335	-----		2,335	-----	2,335
East Texas Refg. Co., 1935.....	3,892	-----			3,892	3,892
Grogan Oil Co.:						
Hurricane Petro. Co.:						
1935.....	5,673	-----			5,673	5,673
1936.....	95,396	-----		4,372	91,024	95,396
1937.....	126,439	-----		22,919	103,520	126,439
Total Hurricane.....	227,508	-----		27,291	200,217	227,508
Oil Refgs. Inc., 1935.....	27,853	-----		190	27,663	27,853
Total Grogan.....	255,361	-----	27,481	27,481	227,880	255,361
Simms Oil Co., 1935.....	3,620	-----		3,620	-----	3,620
Premier Oil Refg. Co., 1936.....	4,785	-----			4,785	4,785
Deep Rock Oil Co.:						
1935.....	1,337	-----	384	953	-----	1,337
1936.....	534	-----	192	342	-----	534
	1,871	-----	576	1,295	-----	1,871
Gulf Refining Co., 1935.....	34,552	-----		34,552	-----	34,552

Motor fuel purchased by Pure from companies selling a branded gasoline, years 1935, 1936, and 1937—Continued

[In barrels]

Purchased From	Barrels Purchased		Barrels Sold		Further Processing or Blending	Total Sales and Processing
	Un-branded	Branded	Un-branded	Branded		
Louisiana Oil Refg. Co.:						
1935.....		26,264		26,264		26,264
1936.....		27		27		27
1937.....		156		156		156
		26,447		26,447		26,447
Mid-Continent Petr. Co.:						
1935.....	8,915		8,915			8,915
1936.....	9,720		9,720			9,720
1937.....	10,823		10,823			10,823
	29,458		29,458			29,458
Phillips Petr. Corp.:						
1935.....	385		385			385
1936.....	1,181				1,181	1,181
1937.....	287		287			287
	1,853		672		1,181	1,853
Shell Petro. Corp.:						
1935.....	403	7,898	403	7,898		8,301
1936.....		9,737		9,737		9,737
1937.....	2,980	5,181	2,980	5,181		8,161
	3,383	22,816	3,383	22,816		26,199
Socony-Vacuum Oil Co., 1935	2,374		2,374			2,374
Standard Oil Co. of Ind., 1935		26,448		26,448		26,448
Cities Service Oil Co., 1937		38,987		38,987		38,987
Ashland Oil & Refg. Co.:						
1935.....	10,248		10,248			10,248
1936.....	11,510		11,510			11,510
1937.....	1,542		1,542			1,542
	23,300		23,300			23,300
Atkinson Petroleum Co.:						
Bradford Oil Refg., 1935	7,229		7,229			7,229
Penn. Refg. Co., 1936	968				968	968
Total Atkinson	8,197		7,229		968	8,197
Atlantic Refg. Co., 1935	493		493			493
Elk Refg. Co.:						
1935.....	2,155		2,155			2,155
1936.....	196			196		196
1937.....	2,351		2,155	196		2,351
Humble Oil & Refg. Co.:						
1935.....	1,558		1,558			1,558
1936.....	3,459		3,459			3,459
1937.....	2,756		2,756			2,756
	7,773		7,773			7,773
Sun Oil Co.:						
1935.....	8,147		8,147			8,147
1936.....	10,667		876	9,791		10,667
1937.....	11,323		5,372	5,951		11,323
	30,137		6,248	23,889		30,137
Standard Oil of Ohio:						
1936.....	38,730		38,730			38,730
1937.....	3,000		3,000			3,000
	41,730		41,730			41,730
Wofford Oil Co., 1936	34				34	34
Hickok Oil Corp., 1937	73		73			73
Shoreline Oil Co., 1937	9,629				9,629	9,629
1935, 1936, 1937 Gasoline Total	860,088	114,698	26,704	678,880	269,202	974,786

SHELL UNION OIL CORPORATION,
50 WEST 50TH STREET,
New York, February 17, 1939.

Re: TNEC Investigation, Exchange and Purchase of Gasoline, Your File HBC 60-57-M.

The ATTORNEY GENERAL,
Department of Justice, Washington, D. C.

DEAR SIR: Enclosed herewith are schedules for this company and its subsidiaries giving the information concerning the exchange and purchase of motor fuel requested in your letter of November 10, 1938, receipt of which has been previously acknowledged by us. Schedule No. 1 is in answer to your interrogatory No. 1 and Schedule No. 2 answers your interrogatory No. 2 relating to amounts received by us on exchange and by purchase which required no further processing or blending.

Your questions refer to exchanges with and purchases from "companies marketing branded motor fuel." In the attached schedules are listed a number of local companies, some of which may not be marketing under their own brands. If it is important for you to know definitely whether or not each named company has its own brand, we shall endeavor to obtain this information for you.

In subsection (c) of your questions 1 and 2 you ask what percentage of the motor fuel received on exchanges or purchased was resold under Shell brands. We are not sure that we can ascertain the exact percentages but in order to avoid delay we have made a close approximation, which we believe to be substantially correct although a detailed analysis would no doubt show minor variations. While on the subject of percentages, we should point out that the amount of motor fuel received through exchanges or purchases is only a small fraction of the total volume of this product sold by us and to a large extent represents deliveries made to us because of some emergency. For instance, two of our major refineries were forced to shut down for a period of several weeks. In another case, a tanker strike in which we were not individually involved necessitated broad exchange arrangements in order that the supply of gasoline to the public would not be curtailed. We have not been able to include in the figures small loans of gasoline which might be made locally from time to time but which would not be of sufficient importance to become a matter of record at our central office.

In order that you may fully understand our position with reference to exchanges and purchases, we should point out that the tendered gasoline is tested and if it does not meet our prescribed specifications it is either rejected or subjected to further processing or blending. Each company has its own requirements. For instance, when we are purchasing a motor fuel to be resold as "Super Shell" our specifications will probably be very different from those of practically every other buyer because in most companies a leaded gasoline is used for the regular brand whereas our regular brand "Super Shell" is for the most part unleaded. Conversely, when we manufacture gasoline for sale to other companies it has to conform to their specifications and may not at the same time comply with our requirements for a comparable grade. Any motor fuel accepted by us on exchange or by purchase which does not meet the requirements of the Shell brand under which it is to be sold must necessarily undergo further processing or blending.

No one official of our company is acquainted with all of the transactions covered by the schedules. We, therefore, give you in answer to your question No. 3 the names of three individuals with their addresses:

Age Skiolvig, Shell Union Oil Corporation, 50 West 50th Street, New York, N. Y.

M. E. Grant, Shell Petroleum Corporation, Shell Building, St. Louis, Missouri.

R. V. Miller, Shell Oil Company, Shell Building, San Francisco, Calif.

Very truly yours,

SHELL UNION OIL CORPORATION,
S. W. DUBIG.

SCHEDULE 1. Motor fuel requiring no further processing or blending exchanged by other companies marketing branded motor fuel with Shell Union Oil Corporation including its subsidiary companies

(a) With what companies were such exchanges carried on	(b) What quantities (in barrels) were exchanged with each company during—			(c) What percentage of the motor fuel received on exchange was sold under Shell brands		
	1935 ¹	1936 ¹	1937 ¹	1935	1936	1937
J. B. Berry & Sons Co.....	787		4,856	100	100	100
Cities Service Oil Co.....	8,917			100	100	100
Colonial Beacon Oil Co.....	23,925	174		100	100	100
Continental Oil Co.....		52,581	118,338	100	100	100
Gulf Oil Corp. and/or Gulf Refining Co..	137,772	600,064	938,055	97	97	97
Jenney Manufacturing Co.....		65,229	79,057	100	100	100
Richfield Oil Co.....	45,057	4,906	117	100	100	100
Standard Oil of New Jersey.....	2,498		191	100	100	100
Texas Co.....	147,525	160,567	451,458	100	100	100
Warner Quinlan Oil Co.....		3,612		100	100	100
Atlantic Refining Co.....			85,637	100	100	100
Sun Oil Co.....			303	100	100	100
Aetna Oil Service, Inc.....	5,793	8,785	8,409	100	100	100
Mid Continent Pet. Co.....	3,757	4,969	2,689	100	100	100
Pure Oil Co.....	9,368	41,418	36,048	100	100	100
Sinclair Refining Co.....	515,398	341,229	199,063	99	99	99
Socony-Vacuum Oil Co.....		3,189	76,543	100	100	100
Standard Oil of Indiana.....	90,854			100	100	100
Deep Rock Oil Corp.....		39,056	195	100	100	100
Associated Oil Co.....	1,732	1,437	449	100	100	100
General Petroleum Corp.....	50,776	9,633	48,654	100	100	100
Gilmore Oil Co.....		87		100	100	100
Hancock Oil Co.....	11,535			100	100	100
McMillan Petroleum Corp.....	8,024	89		100	100	100
Rio Grande Oil Co.....		719	77	100	100	100
Standard Oil of California.....	119,090	138,489	144,069	100	100	100
Union Oil of California.....	26,379	22,419	22,092	100	100	100
Ashland Oil Co.....		6,987		100	100	100
Pan American Pet. & Trans. Co.....			146,540	100	100	100
Standard Oil of California.....	41,207					
	1,250,394	1,505,639	2,362,840	99	99	99

¹ Receipts

Quantities exchanged and received at refineries are treated as requiring further processing or blending for consumer distribution since almost all of such receipts are further processed and all are so commingled with other stocks as to be untraceable.

SCHEDULE 2. Motor fuel requiring no further processing or blending purchased from other companies marketing branded motor fuel by Shell Union Oil Corporation, including its subsidiary companies

(a) From what companies were such purchases made	(b) What quantities (in barrels) were purchased from each company during—			(c) What percentage of motor fuel so purchased was sold under Shell brands		
	1935	1936	1937	1935	1936	1937
American Oil Co.....	467	66		100	100	100
Atlantic Refining Co.....	157			100	100	100
J. B. Berry & Sons Co.....	2,397	7,252		100	100	100
Republic Oil Co.....		4,155		100	100	100
Sun Oil Co.....		268,504		100	100	100
Colonial Beacon Oil Co.....	167		24	100	100	100
Gulf Oil Corp'n.....		40	70,360	100	100	100
Pure Oil Co.....	1,961	5,874	10,664	100	100	100
Sinclair Refining Co.....	2,877	25	25,567	100	100	100
Standard Oil of New Jersey.....	636	242	3	100	100	100
Jenney Manufacturing Co.....		22		100	100	100
Socony-Vacuum.....		330	78,879	100	100	100
Alpine Oil Co.....			966	100	100	100
Amsco Refg. Co.....			7,135	100	100	100
Ashland Oil & Refg. Co.....		5,857		100	100	100
Atlas Oil Corp.....		194,589	179,021	100	100	100
Barnsdall Refg. Corp.....			32	100	100	100
Bell Oil & Gas Co.....	11,174	41,008	631	100	100	100
Black Gold Refg. Co.....			589	100	100	100
Canfield Oil Co.....			664	100	100	100

SCHEDULE 2. Motor fuel requiring no further processing or blending purchased from other companies marketing branded motor fuel by Shell Union Oil Corporation, including its subsidiary companies—Continued

(a) From what companies were such purchases made	(b) What quantities (in barrels) were purchased from each company during—			(c) What percentage of motor fuel so purchased was sold under Shell brands		
	1935	1936	1937	1935	1936	1937
Cities Service Co.			999	100	100	100
Continental Oil Co.	153	255	2,339	100	100	100
Cosden Oil Corp.			31,913	100	100	100
Canciger Oil & Refg. Co.	1,742	6,029		100	100	100
Dickey Oil & Refg. Co.		590	5,429	100	100	100
Eason Oil Co.	383		7,884	100	100	100
East Texas Refg. Co.	1,943			100	100	100
Eldorado Refg. Co.			2,863	100	100	100
Empire Oil & Refg. Co.		20,835		100	100	100
Globe Oil & Refg. Co.		27,358		100	100	100
Henry H. Cross Co.		11,391		100	100	100
Humble Oil & Refg. Co.	2,355			100	100	100
Johnson Oil Refining Co.		1,943	10,415	100	100	100
Kanotex Refg. Co.		13,515		100	100	100
Leonards Refineries			155	100	100	100
Lion Oil Refining Co.		63	6,262	100	100	100
Malco Refineries, Inc.			9,876	100	100	100
Marathon Oil Co.		114		100	100	100
McMurray Refg. Co.			38,847	100	100	100
Mid Continent Pet. Corp.			3,145	100	100	100
Naph-Sol Refg. Co.		193		100	100	100
National Refg. Co.			161	100	100	100
Omar Refg. Co.		944		100	100	100
Olney Oil & Refining Co.		11,156	14,293	100	100	100
Orange State Oil Co.		1,166	6,811	100	100	100
Pan American Pet. Trans. Co.			210	100	100	100
Phillips Petroleum Co.			1,715	100	100	100
Phoenix Refg. Co.			2,533	100	100	100
Rock Island Refg. Co.		947	776	100	100	100
Rodessa Oil & Refg. Co.		7,960		100	100	100
Shoreline Oil Co.		3,870	24,390	100	100	100
Skelly Oil Co.			2,330	100	100	100
Southport Petroleum Co.			140,442	100	100	100
Standard Oil of Indiana	13	50	30	100	100	100
Standard Oil of Kentucky		24	93	100	100	100
Standard Oil of Ohio		32,775		100	100	100
Standard Oil of Texas	5,732	13,103	17,651	100	100	100
Talco Asphalt & Refg. Co.			10,263	100	100	100
Texas Oil Products Co.	385			100	100	100
Texas Pacific Coal & Oil Co.	6,573			100	100	100
The California Co.			140,486	100	100	100
Texas Co.	123	8,100	11,209	100	100	100
Tidewater Oil Co.			233	100	100	100
United Refg. Co.			8	100	100	100
Vickers Petroleum Co.			11,596	100	100	100
Wadhams Oil Co.		366	1,330	100	100	100
Waggoner Refg. Co.	1,941	4,739		100	100	100
Western Oil & Fuel Co.		14,231		100	100	100
Woffard Oil Co. of Georgia			434	100	100	100
Wood Moore Corp'n		1,137		100	100	100
Associated Oil Co.	12	17		100	100	100
Fletcher Oil Co.			2	100	100	100
Gem State Oil Co.	8			100	100	100
General Petroleum Corp.		3		100	100	100
Home Oil & Refg. Corp.	238			100	100	100
Pasotex Petroleum Corp.	10,180			100	100	100
Standard Oil of California	97	31	129	100	100	100
Union Oil of California	379		13	100	100	100
Utah Oil & Refg. Co.	155,335	169,938	201,216	100	100	100
Central Oil Co. (through Pacific Coast Petroleum Agency)	17,116			100	100	100
	224,544	880,807	1,083,016			

Quantities purchased and received at refineries are treated as requiring further processing or blending for consumer distribution since almost all of such receipts are further processed and all are so commingled with other stocks as to be untraceable.

Receipts on account of purchases made through the Pacific Coast Petroleum Agency are arbitrarily treated as received at refineries since no records exist on which to base a segregation thereof.

J. F. NAGLE
Executive Assistant

SKELLY OIL COMPANY,
Tulsa, Oklahoma, December 30, 1938.

Your File 60-57-M
The ATTORNEY GENERAL,
Department of Justice, Washington, D. C.

DEAR SIR: We are glad to give you the information requested in your letter of November 10th, receipt of which was acknowledged in ours of November 21st:

(1) Skelly Oil Company, in the years 1935, 1936, and 1937, engaged in the exchange of finished motor fuel with other companies marketing branded motor fuel.

(a) Such exchanges were with The Texas Company and Sinclair Refining Company in 1935, 1936, and 1937, and with Cities Service Oil Company during part of 1937.

(b) With The Texas Company, we exchanged approximately 115,246 barrels in 1935, approximately 124,951 barrels in 1936, and approximately 131,252 barrels in 1937. With Sinclair Refining Company we exchanged approximately 16,138 barrels in 1935, approximately 14,183 barrels in 1936, and approximately 18,443 barrels in 1937. No gasoline was exchanged with Cities Service in 1935 or 1936, but approximately 1955 barrels were exchanged in 1937.

(c) All of the motor fuel received on these exchanges was sold under the brands of Skelly Oil Company.

(2) Skelly Oil Company, in the years 1935, 1936, and 1937, purchased finished motor fuel from other companies, for resale by this company under its own brands. Most of the companies from whom such purchases were made marketed motor fuel under their own brands, but some of the companies either marketed entirely unbranded motor fuels, or both branded and unbranded gasoline.

(a) Companies from whom such purchases were made are shown on the attached statement.

(b) Quantities purchased during each of the years indicated are, likewise, shown on the attached statement.

(c) All of the motor fuel was purchased for sale under the brands of Skelly Oil Company

(3) Mr. W. T. Atkins, Vice President in Charge of Marketing, for this company, whose address is 47th & Pennsylvania, Kansas City, is the official of this company conversant with such motor fuel purchases and exchanges. The writer also is conversant with this subject.

Any further information which you may wish, in connection with these exchanges and purchases, will be very gladly given.

Very truly yours,

J. F. NAGLE,
Executive Assistant.

JFN rh

J. H. TUTTLE
Secretary

STANDARD OIL COMPANY OF CALIFORNIA,
STANDARD OIL BUILDING,
San Francisco, Cal., December 14, 1938.

MR. THURMAN ARNOLD,
Assistant Attorney General, Department of Justice,
Washington, D. C.

DEAR SIR: With reference to your letter of November 10th, in which you request certain information on exchanges with and purchases of motor fuel from other companies marketing branded motor fuel:

We are attaching hereto the information as requested.

Very truly yours,

J. H. TUTTLE,
Secretary.

Purchases of finished motor fuel from other companies, in barrels, in 1935, 1936 and 1937

Name of company	1935	1936	1937
Anderson-Prichard Oil Corp. Cyril, Okla.	13,021	7,294	13,824
Arkansas Fuel Co., Shreveport, La.			5,184
Barnsdall Refining Company, Tulsa, Okla.		49,672	
Bay Petroleum Company, Denver, Colo.			7,104
Black Gold Refining Co. Oklahoma City, Okla.	2,504	3,729	6,528
Chase Refining Company, Chase, Kans.		22,100	9,024
Coltref Refining Company, Colorado, Tex.		2,105	8,107
Continental Oil Company, Ponca City, Okla.	125,000		
Cosco Refining Company, Wynnewood, Okla.		6,132	3,747
Cusco Refining Company, Chase, Kans.	25,531	2,460	
Danclger Refineries Inc. Pampa, Tex.	1,355	18,131	18,248
Deep Rock Oil Corporation, Cushing, Okla.	38,694	38,967	36,448
Dickey Refining Company, McPherson, Kansas		9,321	1,921
Eason Oil Company, Enid, Okla.			2,890
El Dorado Refining Company, El Dorado, Kans.		9,169	
Louisiana Oil & Ref. Co. Shreveport, La.		4,010	
Monarch Ref. Company, Oklahoma City, Okla.	1,864	2,602	
Olney Oil & Refining Company, Olney, Tex.		2,864	2,304
Panhandle Refining Company, Wichita Falls, Tex.	4,029		
Phillips Petroleum Co. Bartlesville, Okla.	14,622	13,305	9,608
Rock Island Refining Co. Duncan Okla.	8,226	8,713	12,971
Russell Refining Company, Russell, Kans.		4,715	
Simms Oil Company, Dallas, Tex.	6,486		
Sunray Oil Company, Allen, Okla.	27,392	29,075	16,419
Taxman Refining Co. Wichita Falls, Tex.	58,145	25,872	18,048
Triangle Refining Co. Oklahoma City, Okla.	1,157		
Waggoner Refining Company, Electra, Tex.	10,711	6,038	
Wilcox Oil & Gas Company, Tulsa, Okla.	13,029	6,945	
Wirt Franklin Pet. Co., Ardmore, Okla.	3,789		
Miscellaneous purchases, less than 1000 bbls. from any one company.	3,358	1,918	4,227

EXCHANGES

1. Did the Standard Oil Company of California and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Yes.

If so:

(a) With what companies were such exchanges carried on?	Year	(b) What quantities (in barrels) were exchanged with each company during each of the years indicated? (42-gallon barrels)
Richfield Oil Co. of Calif.	1935	-----
	1936	-----
	1937	828
Shell Oil Company	1935	116,244
	1936	103,514
	1937	176,680
Associated Oil Company	1935	1,552
	1936	12
	1937	-----
The Texas Company	1935	32,524
	1936	26,479
	1937	18,375
Union Oil Co. of California	1935	59
	1936	-----
	1937	407

(c) What percentage of the motor fuel on such exchanges was sold under the brands of the Standard Oil Company of California?

The above motor fuel was received under prescribed specifications and was accordingly sold under our brands.

NOTE.—Temporary exchanges made to provide consumers with gasoline during the course of a maritime strike in the Northwest for a few months during 1935 have not been included.

PURCHASES

2. Did the Standard Oil Company of California and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies-marketing branded motor fuel, for resale by the Company under its own brands?

Yes.

If so:

(a) From what companies were such purchases made?	Year	(b) What quantities (in barrels) were purchased from each of the companies during each of the years indicated? (42-gallon barrels)
Utah Oil Refining Company.....	1935	61,964
	1936	36,622
	1937	279,020
General Petroleum Corporation of California.....	1935	105
	1936	92,457
	1937	-----
Richfield Oil Co. of California.....	1935	3,609
	1936	-----
	1937	-----
Shell Oil Company.....	1935	-----
	1936	-----
	1937	100
Continental Oil Company.....	1935	-----
	1936	-----
	1937	182

(c) What percentage of motor fuel so purchased was sold under the brands of the Standard Oil Company of California?

The above motor fuel was received under prescribed specifications and as accordingly sold under our brands.

3. The name and address of the official of the Standard Oil Company of California conversant with such motor fuel exchanges and purchases.

Mr. J. H. Tuttle, 225 Bush Street, San Francisco, California.

SOCONY-VACUUM OIL COMPANY, INCORPORATED,
26 BROADWAY,
New York, January 4, 1939.

Re: HBC—60-57-M. Exchanges and Purchases of Motor Fuel. Refer: Your letter of November 10, 1938.

Honorable THURMAN ARNOLD,
Assistant Attorney General, Department of Justice,
Washington, D. C.

DEAR SIR: Our answer to the first paragraph of your questions 1 and 2 is in the affirmative.

The data requested in the remaining portions of your questions 1 and 2 is attached on two schedules, one dealing with Exchanges and the other with Purchases.

No one official or employee is familiar with all purchases and exchanges of this company and its subsidiaries. They are handled by a number of different units. Mr. J. H. Romer, of 26 Broadway, New York, N. Y., an employee of Socony-Vacuum Oil Company, Incorporated, is conversant with the exchanges of that company. Mr. Romer is also familiar with exchanges of Wadhams Oil Company, of Milwaukee, Wisconsin, a subsidiary.

Mr. George Miller, Manager of the Distribution Department of Magnolia Petroleum Company, a subsidiary, of Dallas, Texas, is conversant with exchanges and purchases by that company.

Mr. R. L. Minckler, of 1003 Higgins Building, Los Angeles, California, is conversant with exchanges and purchases of General Petroleum Corporation of California, also a subsidiary.

We do not believe that a proper understanding of our exchanges and purchases can be elicited from your questions alone. Consequently, we are attaching a

short memorandum dealing with our reasons for making these transactions and their effects.

Very truly yours,

G. V. HOLTON.

GVH-MAH
Att.

SOCONY-VACUUM OIL COMPANY, INCORPORATED,
26 BROADWAY,
New York, December 29, 1938.

Re: HBC—60—57—M. Questionnaire on Gasoline Exchanges.

Mr. THURMAN ARNOLD,
Assistant Attorney General, Department of Justice,
Washington, D. C.

DEAR SIR: As you know, promptly upon receipt of your questionnaire we took steps to assemble the information sought. We have, however, run into a number of difficulties causing unavoidable delays, due chiefly to the fact that our records have not been kept so as to permit the particular breakdown of figures in which you are interested. Despite all of our efforts we may have to substitute in certain cases estimates in lieu of exact figures because the latter are unobtainable. In any event, we hope to be able to reply to your questions in the early part of January, 1939.

Very truly yours,

G. W. HOLTON.

GVH-MAH

[42 gal. bbls.]

	1935	1936	1937
Standard (Ind.).....	119,938		
Sinclair.....	1,205,674	1,745,274	1,708,531
Humble.....	132,213	159,750	180,443
Gulf.....	1,269,909	1,617,747	1,709,449
Texas.....	250,097	235,597	142,752
Tide Water.....	840,465	783,670	659,896
Ohio.....	47,775	199,206	296,252
Empire.....	525,419	343,755	310,336
Shell-Union.....	15,480	68,145	122,543
Theisen-Clemens.....	43,508	31,345	81,444
Pure.....		170,089	492,860
Standard (Calif.).....	81,663	67	
Sunset Oil Co.....			
Standard of Ohio.....	275,230	212,375	205,652
Richfield Oil Corp.....	21,718	70,644	2,010
Standard of Pa. ¹			
Standard (N. J.).....	54,858		
Pennzoil.....	24,867	67,802	58,473
Eastern States Pet. Co.....	9,420		
Atlantic.....			
Union Oil of Calif.....	30,367	778	69
Valvoline.....			6,321
American Mineral Spirits.....			60
Sun Oil Co.....			10,424
	5,772,708	6,609,826	6,895,559

¹ Includes some short term borrowings and repayments of gasoline to take care of emergencies caused by floods, fires, etc. which were usually repaid at the same point. Such transactions are not universally regarded as exchanges. We have included them in our records and at this date it would be extremely difficult, if not impossible, to separate out these borrowings. Furthermore no useful purpose would be served by such separation because our estimate of the amount of these borrowings shows them to be relatively trifling. Receipts and deliveries for any given period are rarely, if ever, in balance. The excess of deliveries over receipts, for example, for one period may be due to a liquidation of an excess of receipts over deliveries for a prior period and vice versa; or an excess in one period may be adjusted in a subsequent period. When a running exchange is closed out, then the excess, if any, is treated as a purchase or sale as the case may be.

Socony-Vacuum Oil Co., Inc. & domestic subsidiaries—Exchanges of motor fuel with other companies who market branded gasoline, years 1935–1936–1937

[In 50 Gallon Barrels]

	Received by Socony-Vacuum			Delivered by Socony-Vacuum		
	1935	1936	1937	1935	1936	1937
Standard Oil Co. (Ind.)	100,748			109,382		
Sinclair Refining Co.	1,012,766	1,466,030	1,435,166	952,816	1,448,887	1,434,491
Humble Oil & Refining Co.	111,059	134,180	151,572	111,494	134,716	146,159
Gulf Oil Corporation	1,066,724	1,358,907	1,435,937	1,066,328	1,432,902	1,193,420
The Texas Company	210,081	197,901	119,912	176,451	235,251	138,343
Tide Water Associated Oil Co.	705,991	658,283	554,313	580,582	632,600	509,581
Ohio Oil Company	40,131	167,333	248,852	36,273	168,479	217,144
Empire Oil & Refining Co.	441,352	288,754	260,682	428,019	291,958	243,691
Shell-Union Oil Co.	13,003	57,242	102,936	34,449	39,685	105,003
Theisen-Clemens Co. Mid-C	36,516	26,330	68,413		40,154	37,696
Pure Oil Company		142,875	414,002		182,933	391,368
Standard Oil Co. of Calif.	68,597	56		10,482	63,746	
Sunset Oil Company				7,312	882	
Standard Oil Co. of Ohio	231,193	178,395	172,748	205,554	200,387	247,395
Richfield Oil Corp.	18,243	59,341	1,688	90,657	19,592	7,573
Standard Oil Co. of Penna. ¹	692,250	759,009	762,758	655,154	782,209	761,426
Standard Oil Co. of New Jersey	46,081			68,022		
Pennzoil Company (Indep.)	20,888	56,954	49,117	23,206	49,758	50,258
Eastern States Petro. Co.	7,913			7,925		
Atlantic Refining Co.				50,082		
Union Oil Co. of California	25,509	654	58	23,090	563	150
Valvoline Oil Co.			5,310			5,310
American Mineral Spirits Co.			50			50
Sun Oil Co.			8,756			8,674
Total	4,849,075	5,552,254	5,792,270	4,637,278	5,724,702	5,507,732
% of Total sold under S-V Brands (Estimated)	53.2	76.7	79.5			

¹ Our exchange receipts and deliveries for 1937 in respect of Gulf Oil Corp. do not include 50,582 bbls. which we regarded as a storage arrangement rather than an exchange.

² Our exchange receipts and deliveries for 1936 and 1937 in respect of Tide Water Associated Oil Co., do not include approximately 500,000 barrels in 1936 and 600,000 barrels in 1937, which we consider a storage or transportation arrangement rather than an exchange.

³ Includes receipts from and deliveries to affiliated companies of S. O. Co. of Penna. for its accounts.

DECEMBER 30, 1938.

Socony-Vacuum Oil Co., Inc. and domestic subsidiaries—Purchases of motor fuel from other companies who market branded gasoline, years 1935–1936–1937

[In 50 gallon barrels]

	1935	1936	1937
Standard Oil Co. of New Jersey	3,301,182	2,734,023	2,364,503
Standard Oil Co. of Pa.	299,718	287,235	407,814
The Texas Co.	6,577		
Chalmette Pet. Co.	63,205		
Globe Oil & Refining Co.	169,958	60,060	1,942
Empire Oil & Refining Co.	208,809	11,103	27,302
Anderson Prichard Refining Co.	2,439		
Daniger Oil & Refineries Co.	21,823	148,529	50,978
East Texas Refining Co.	18,928		20,909
Champlin Refining Co.	18,794		4,085
Wilcox Oil & Gas Co.	27,099	75,787	11,460
Gulf Oil Corp.	26,280		1,828
Hurricane Pet. Corp.	2,557		
Phillips Pet. Corp.	20,466	23,949	65,226
Simms Oil Co.	8,790		
Standard Oil Co. of Indiana	16,875		6,095
Cushing Refining & Gaso. Co.	18,627	4,858	
Dickey Oil & Refining Co.	1,613	3,273	
Eason Oil Co.	1,780		
Omar Refining Co.	7,994		1,618
Vickers Pet. Co.	6,347		
Standard Oil Co. of La.	2,640	1,703	3,181
Standard Oil Co. of Calif.	16,452	18,909	9,319
Pasotex Refining Co.	177,245		
Standard Oil Co. of Texas		145,166	147,882

Socony-Vacuum Oil Co., Inc. and domestic subsidiaries—Purchases of motor fuel from other companies who market branded gasoline, years 1935-1936-1937—Con.

[In 50 gallon barrels]

	1935	1936	1937
Waggoner Refining Co.....	95,873	84,165	102,473
Louisiana Oil Refining Co.....	97,203	225,194	.....
Panhandle Refining Co.....	26,570	15,865	27,581
Taylor Refining Co.....	2,820	.....	.....
Republic Oil Co.....	.....	141,398	.....
Standard Oil Co. of Ohio.....	.....	18,571	23,274
Continental Oil Co.....	.....	7,182	26,373
Lion Oil Refining Co.....	.....	41,985	125,508
Atlas Oil Corp.....	.....	8,606	.....
Col-Tex Refining Co.....	.....	1,113	.....
Marathon Oil Co.....	.....	7,169	.....
Phoenix Refining Co.....	.....	3,887	3,270
Norwalk Co.....	.....	5,885	.....
Petroleum Heat & Power Co.....	.....	.....	269,356
Pennzoil Co.....	.....	.....	12,856
Arkansas Fuel Co.....	.....	.....	168,969
Shamrock Oil & Gas Co.....	.....	.....	27,004
Total.....	4,668,655	4,075,615	3,910,806
Miscellaneous—under 1,000 barrels.....	5,873	5,777	4,606
Grand total.....	4,674,528	4,081,392	3,915,412

% of Total Sold under S. V. Brands, 1935, 96.1, estimated; 1936, 96.3, estimated; 1937, 96.8 estimated.¹

¹ We are unable to ascertain. Our records do not reflect the disposition of purchased gasoline as between branded and unbranded. In the case of exchange receipts we can fairly accurately estimate because the receipts pass with more or less regularity through the same distribution channels of ours. Purchased gasoline does not flow through the same channels from month to month. We have therefore, based our estimate on the ratio of our branded to total sales generally.

DECEMBER 29, 1938

MEMORANDUM RE EXCHANGES AND PURCHASES

Reason for exchanges.—The principal reason for exchanges is the prevention of costly and wasteful duplication of facilities, cross shipping and unnecessarily long shipments.

If a refiner has a surplus which cannot be sold through its usual channels in the normal marketing area near the refinery, the logical outlet is either to a more remote area or to competitive marketing organizations in the immediate area which have a deficiency of supply or a remote, costly source of supply. Conversely, a refiner not making enough for its own regular marketing requirements must buy from other refiners or ship from remote sources of its own. For years Socony-Vacuum has purchased or taken by exchange on its own specifications, a portion of its gasoline and certain other products, although the Socony-Vacuum group of companies manufactures nearly all the products it sells, including all important, branded lubricants. Its purchases and exchanges are largely confined to what might be considered staple products, such as gasolines, fuel oils, kerosenes and some partially finished stocks.

Exchange arrangements are also brought about by the fact that Company A having a refinery, let us say in the Middle West, wishes to enter the marketing field in the East. Company B is conversely situated in the East and wishes to enter the marketing field in the Middle West. Each is determined to expand its market geographically because marketers know that once a certain position has been reached in a given area, the cost of getting additional business is out of proportion to the return.

When A decides to go into what we may call B's territory for the purposes of this example, and B decides to go into A's, each can do it by building refineries or large terminals in the new territory. Usually the volume of business expected will not warrant such an outlay, at least at the start. A large bulk or terminal storage plane economically supplied (especially by pipe line or water) often has the same advantages as a refinery for exchange purposes. Until the new operation is sufficiently large to justify a refinery, or a marine or pipe line terminal it is probably wiser for A and B each to buy *on specification* the large volume products (gasoline, etc.) that each will need in the new area. The small volume products,

such as motor oils, industrial lubricants, etc., can be shipped by each from its own refinery without excessive freight losses.

A and B are therefore in the position of buyers in the new areas. If they do not buy and thus secure their principal products at lower costs than if shipped from remote supply points, they will be disadvantageously situated in respect to competition. Nothing is more logical under such circumstances than for A and B to make an exchange arrangement.

The modern merchandiser in the petroleum industry knows that there is no such thing as dominating a market. Competition is intense. Neither competition nor modern policies of price-making, where the industrialist has any power of his own outside of market influences in setting his price, will permit more than a modest profit at best. Therefore, as a practical matter, A has nothing to gain by trying to make B's entrance into A's territory more costly. B with the limitations on increasing his own home market is bound to come into A's territory, and A for the same reason is bound to go into B's. Each will undoubtedly purchase at the outset from local refiners, at least until each builds up a sufficient business to justify either a local refinery in the new territory, or, in lieu thereof, a modern pipe line or water terminal and the necessary transportation to such terminal.

Exchanges do not mislead the public.—In all such arrangements to which Socony-Vacuum is a party Socony-Vacuum is strict in respect of specifications. It generally happens that the product received meets Socony-Vacuum specifications. (If it did not, it is doubtful if an exchange or purchase would be made.) In such a case there cannot be any fraud practiced on the public. The exchange-recipient receives gasoline of its own refinery specifications, and when it markets the product to the public under its brand, it is doing exactly what the law contemplates, namely, using its brand to identify the product as coming from it. There is nothing in the law of unfair competition or trademarks that even suggests that the user of a brand or trademark must make the goods sold by it. The exchange-recipient, quite apart from law, is certainly keeping faith with its trade when it delivers goods of its usual specifications.

If for any reason an exchange-recipient gets a product which does not measure up to specification, the product is rejected or brought up to specification.

There is nothing novel in these exchanges or purchases. They have been going on for years. Marketers of so-called minor or local brands rarely make what they sell. They buy, and there has been no outcry against them in this respect. The practice of buying unbranded goods and reselling under the buyer's brand is followed in many lines of business. The large mail order houses, for example, sell many items under their own brands which are manufactured for them by others. Drugs, cosmetics, toilet articles, foods, apparel, sporting goods, building materials and hundreds of other products often carry the brands of those who market rather than those who make them. Exchanges in our industry are nothing but forms of mutual purchases and in respect of the brand question are entitled to the same acceptance that is given to goods purchased by marketers of other products who resell them under their own brand names.

Exchanges stimulate competition and are of advantage to the public.—Each of the parties to an exchange is in a position in a new marketing area where its business is not large to sell and deliver more effectively than if it brought its own product in. Each is in the same position as if it had the same refinery or large terminal advantage in the new territory which the exchange-shipper has in that territory. As a result, each is able to compete more effectively in both territories. Exchanges thus make for more effective competition. They especially tend to break down any chances of geographic monopoly.

If it be argued that other competitors who do not enjoy similar advantages are not in as good position as the exchanging companies, it must be remembered that each of the exchange parties already had a marketing advantage at its original supply point before the exchange occurred, and those without such advantage are in no worse position than they were previously. On the other hand, other companies which by reason of their own refineries or large terminals enjoy a similar marketing advantage at their original supply points are just as free as the present exchanging companies to make exchange arrangements of their own.

Exchanges among jobbers can often be as useful as those among refiners. The same principle applies. Any distributor, small as well as large, with surplus refinery capacity or economic storage capacity and the right kind of product is a potential party to a useful exchange. Exchanges are not limited to the giants in the industry. The parties with whom Socony-Vacuum units make exchanges include a number of smaller companies.

Gasoline exchanges and purchases cannot be considered as instruments of arbitrary price control nor as instruments to maintain rigid prices. The direct, logical and obvious effect of exchanges and purchases is against both arbitrary price control and the maintenance of rigid prices. Exchanges and purchases do not involve any agreement or understanding in respect of resale prices.

The increasingly competitive effect of an exchange arrangement is not limited to what the parties do themselves in their direct marketing. Very few refiners sell more than a minor portion of their product directly to consumers. Their distribution is largely through resellers. When a refiner participates in an exchange and is thereby better enabled to enter a new territory, the refiner is the means of giving jobbers and dealers a new source of supply. An exchange does not always mean that the products offered by the exchanging parties in the same area are necessarily of the same quality. They may be different, but even if they are identical, there are still other powerful competitive factors besides quality. The low cost to the exchange-recipient and his competitive influence arising therefrom is a powerful deterrent to those who might try to get all the traffic would bear.

Another advantage to the public of the exchange arrangement is that it helps insure to each party a continuous market for products and thus results in a more even use of manufacturing facilities and consequently greater stability of employment and low price stability which come from capacity or near-capacity operation.

Purchases.—The same economic and expansion reasons that motivate exchanges also bring about certain purchases by Socony-Vacuum.

On the Standard Oil dissolution in 1911, Socony-Vacuum was fundamentally a marketing company. Its refinery capacity was far from equal to its marketing needs. As pointed out in the F. T. C. Report on Prices, Profits and Competition in the Petroleum Industry, issued in December, 1927, Socony-Vacuum has been more and more integrating itself by the purchase and development of crude properties, transportation facilities and refinery capacity. As the years have gone by Socony-Vacuum has purchased less and less from outside sources. All of its important branded lubricants are made by Socony-Vacuum. The lubricants which it purchases are for the most part lubricating stocks bought on strict specifications. All products in fact which it buys are purchased on strict specifications established as Socony-Vacuum standards.

DECEMBER 14, 1938.

STANDARD OIL COMPANY (INDIANA),
910 SOUTH MICHIGAN AVENUE,
Chicago, Ill., December 7, 1938.

File: CTB.

Subject: Motor fuel ex. and pur.

Your file reference: HBC. 60-57-M.

DEPARTMENT OF JUSTICE,

Washington, D. C.

(Attention: Mr. Arnold.)

GENTLEMEN: Attached hereto is statement covering information requested in your letter of November 12, 1938. We regret the delay in getting this information to you, but please accept our assurances that it was assembled as rapidly as the nature of the inquiry would permit.

We should like to make a brief explanation in connection with the questions "what percentage of the motor fuel received on such exchanges (or purchases) was sold under the brands of the Standard Oil Company (Indiana)" or under the brand name of a subsidiary so receiving.

Every contract for the exchange or purchase of motor fuel made by Standard (Indiana) expressly provided that the supplier was obliged to supply us with a motor fuel meeting definite specifications, and these specifications were in turn identical with motor fuel of our own manufacture which we were currently selling under a particular brand, and the supply of which brand we intended to supplement by the use of the motor fuel so obtained by exchange or purchase. Except in isolated instances and inconsequential amounts, this same plan was followed by our subsidiaries. You will note that Pan American Petroleum and Transport Company report that 18.5% of total sales made by them during the period covered in the report represented unbranded gasoline. This percentage includes motor fuel procured by purchase or exchange. We believe this percentage would represent a fair average for all subsidiaries covered in the report.

Yours very truly,

C. J. BERGESON.

REPLY TO DEPARTMENT OF JUSTICE QUESTIONNAIRE ADDRESSED TO STANDARD OIL COMPANY (INDIANA) UNDER DATE OF NOVEMBER 12, 1938

ANSWERS SUBMITTED ON BEHALF OF THE PARENT COMPANY

Question 1. Did the Standard Oil Company (Indiana) and its economic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. Yes.

Question 1-a. With what companies were such exchanges carried on?

Answer. Lincoln Oil Refining Company (Ohio Oil Company), Shell Petroleum Corporation, Socony-Vacuum Oil Company.

Question 1-b. What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer.

DELIVERIES BY STANDARD OIL COMPANY (INDIANA)

[42-gallon barrels]

	Year 1935	Year 1936	Year 1937
Delivered to:			
Lincoln Oil Refining Company (Ohio Oil Company).....	120, 799		
Shell Petroleum Corporation.....	90, 855		
Socony-Vacuum Oil Company.....	119, 937		
Total.....	331, 591		

DELIVERIES BY THE FOLLOWING, TO STANDARD OIL COMPANY (INDIANA)

Received from:			
Lincoln Oil Refining Company (Ohio Oil Company).....	120, 783		
Shell Petroleum Corporation.....	84, 206		
Socony-Vacuum Oil Company.....	130, 218		
Total.....	335, 207		

The differences between quantities shipped and quantities received, were either purchased or sold by the respective companies.

Question 1-c. What percentage of the motor fuel received on such exchanges was sold under the brands of the Standard Oil Company (Indiana)?

Answer. All the motor fuel received by Standard Oil Company was sold under our Brand names.

Question 2. Did the Standard Oil Company (Indiana) and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Answer. Yes.

Question 2-a. From what companies were such purchases made?

Answer. Black Gold Refining Company
 Barnsdall Refining Company
 Cities Service Oil Company
 Continental Oil Company
 Empire Oil Refining Corporation
 Mid-Continent Petroleum Corporation
 Ohio Oil Company
 Pan Handle Refining Company
 Phillips Petroleum Company
 Sinclair Refining Corporation
 Shell Petroleum Corporation
 The Texas Company
 Waggoner Refining Company

Question 2-b. What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

PURCHASES BY STANDARD OIL COMPANY (INDIANA)

[50-gallon barrels]

	Year 1935	Year 1936	Year 1937
Purchased from:			
Black Gold Refining Company.....			967.18
Barnsdall Refining Company.....		509.22	1,156.64
Cities Service Oil Company.....			681.84
Continental Oil Company.....	41,529.73	27,614.38	8,003.50
Empire Oil Refining Corporation.....			373.84
Mid-Continent Petroleum Corporation.....	2,701.32	1,014.00	5,649.04
Ohio Oil Company.....		131.70	
Pan Handle Refining Company.....		1,621.00	
Phillips Petroleum Company.....		655.20	654.14
Sinclair Refining Corporation.....	5,056.54	8,871.34	
Shell Petroleum Corporation.....			158.78
The Texas Company.....	198.16		
Waggoner Refining Company.....	125,271.72	150,358.34	18,020.78
Total.....	174,757.47	190,775.18	35,665.74

Question 2-c. What percentage of motor fuel so purchased was sold under the brands of the Standard Oil Company (Indiana)?

Answer. All the motor fuel purchased by Standard Oil Company (Indiana), was sold to consumers under our brand names.

Question 3. The name and address of the official of the Standard Oil Company (Indiana) conversant with such motor fuel exchanges and purchases.

Answer. As regards Exchanges: Mr. Allan Jackson, Vice President, Standard Oil Company (Indiana), 910 South Michigan Avenue, Chicago, Illinois.

As regards Purchases: Mr. E. J. Bullock, Vice President, Standard Oil Company (Indiana), 910 South Michigan Avenue, Chicago, Illinois.

ANSWERS SUBMITTED ON BEHALF OF PAN AMERICAN PETROLEUM AND TRANSPORT COMPANY AND SUBSIDIARIES

Question 1. Did the Standard Oil Company (Indiana) and its domestic subsidiaries, in the years 1935, 1936, and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. Yes.

Question 1-a. With what companies were such exchanges carried on?

Answer. Humble Oil and Refining Company.

Question 1-b. What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer.

DELIVERIES BY PAN AMERICAN PETROLEUM AND TRANSPORT COMPANY AND SUBSIDIARIES (PAN AMERICAN REFINING CORPORATION)

[50-gallon barrels]

	Year 1935	Year 1936	Year 1937
Delivered to:			
Humble Oil and Refining Company.....	133,305		

DELIVERIES BY THE FOLLOWING TO PAN AMERICAN PETROLEUM AND TRANSPORT COMPANY AND SUBSIDIARIES (PAN AMERICAN REFINING CORPORATION)

Received from:			
Humble Oil and Refining Company.....	133,305		

Question 1-c. What percentage of the motor fuel received on such exchanges was sold under the brands of the Standard Oil Company (Indiana)?

Answer. Motor Fuel received under exchange agreements was co-mingled in company storage tanks with quantities received from refinery production and

public purchases. Unbranded gasoline sales amounted to approximately 18.5% of the total volume of gasoline sold to public in 1935, 1936 and 1937, and presumably the balance was sold under Pan American trade brands.

Question 2. Did the Standard Oil Company (Indiana) and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Answer. Yes.

Question 2-a. From what companies were such purchases made?

Answer. Republic Oil Company
Gulf Refining Company
Standard Oil Company of Kentucky
Wofford Oil Company
Miscellaneous Small Purchases
American Petroleum Company
Crane Hook Oil and Storage Company
Crown Central Petroleum Corporation
Wiloil Corporation
Socony Vacuum Oil Company
G. and O. Service Company
Corpus Christi Refining Company
Eastern States Petroleum Company, Inc.
Gulf Oil Corporation
Hartol Products Corporation
Richfield Oil Corporation
Sun Oil Company
Cities Service Refining Company
Ashland Refining Company
Cities Service Oil Company
Arkansas Fuel Oil Company
American Petroleum Company of Texas

Question 2-b. What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

Purchases by Pan American Petroleum and Transport Company and subsidiaries (American Oil Company and Pan American Refining Corporation)

[50-gallon barrels]

	Year 1935	Year 1936	Year 1937
Purchased from:			
Republic Oil Company.....	21, 436	60, 170	
Gulf Refining Company.....	8, 705	36, 186	
Standard Oil Company of Kentucky.....	1, 009		
Wofford Oil Company.....	5, 111	7, 177	1, 801
Miscellaneous Small Purchases.....	1, 612	1, 420	2, 055
American Petroleum Company.....	62, 073		
Crane Hook Oil and Storage Company.....	1, 911		
Crown Central Petroleum Corporation.....	140, 046	71, 406	
Wiloil Corporation.....	814	811	
Socony Vacuum Oil Company.....	7, 586		
G. and O. Service Company.....	1, 110		
Corpus Christi Refining Company.....		60, 081	134, 590
Eastern States Petroleum Company, Inc.....		71, 440	246, 473
Gulf Oil Corporation.....		2, 131	1, 193
Hartol Products Corporation.....		65, 002	
Richfield Oil Corporation.....		875	
Sun Oil Company.....		192, 431	
Cities Service Refining Company.....		7, 970	
Ashland Refining Company.....			7, 992
Cities Service Oil Company.....			126, 354
Arkansas Fuel Oil Company.....			68, 064
American Petroleum Company of Texas.....		62, 357	
Total.....	251, 413	639, 457	588, 522

Question 2-c. What percentage of motor fuel so purchased was sold under the brands of the Standard Oil Company (Indiana)?

Answer. Motor Fuel received under purchase agreements was co-mingled in company storage tanks with quantities received from refineries. Unbranded

gasoline sales amounted to approximately 18.5% of the total volume of gasoline sold to public in 1935, 1936 and 1937, and presumably the balance was sold under Pan American trade brands.

Question 3: The name and address of the official of the Standard Oil Company (Indiana) conversant with such motor fuel exchanges and purchases.

Answer. Dr. R. E. Wilson, President Pan American Petroleum and Transport Company 122 East 42nd Street New York, New York.

ANSWERS SUBMITTED ON BEHALF OF PAN AMERICAN SOUTHERN CORPORATION AND SUBSIDIARIES

Question 1. Did the Standard Oil Company (Indiana) and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. Yes.

Question 1-a. With what companies were such exchanges carried on?

Answer. Gulf Oil Corporation and Gulf Refining Company.

Sinclair Refining Company.

Question 1-b. What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer.

DELIVERIES BY PAN AMERICAN SOUTHERN CORPORATION (PAN AMERICAN PETROLEUM CORPORATION)

[50-gallon barrels]

	Year 1935	Year 1936	Year 1937
Delivered to:			
Gulf Oil Corporation and Gulf Refining Company.....	124, 228	497, 122	918, 526
Sinclair Refining Company.....	31, 043	146, 476	190, 410
Total.....	155, 271	643, 598	1, 108, 936

DELIVERIES BY THE FOLLOWING TO PAN AMERICAN SOUTHERN CORPORATION (PAN AMERICAN PETROLEUM CORPORATION)

	1935	1936	1937
Received from:			
Gulf Oil Corporation and Gulf Refining Company.....	141, 815	549, 947	855, 566
Sinclair Refining Company.....	27, 936	153, 502	193, 075
Total.....	169, 751	703, 449	1, 048, 641

Balances due to, or owed by Company, settled in kind upon termination of arrangement.

Question 1-c. What percentage of the motor fuel received on such exchanges was sold under the brands of the Standard Oil Company (Indiana)?

Answer. All gasoline received under this exchange agreement was sold under the brands of the Pan American Petroleum Corporation.

Question 2. Did the Standard Oil Company (Indiana) and its domestic subsidiaries, in the years 1935, 1936 and 1937, purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel, for resale by the company under its own brands?

Answer. Yes.

Question 2-a. From what companies were such purchases made?

Answer. Hartol Products Corporation

Standard Oil Company of Kentucky

Standard Oil Company of Louisiana

Question 2-b. What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

Answer.

Purchases by Pan American Southern Corporation and subsidiaries (Pan American Petroleum Corporation)

[50-gallon barrels]

	Year 1935	Year 1936	Year 1937
Purchased from:			
Hartol Products Corporation	22,020		
Standard Oil Company of Kentucky	1,062	796	627
Standard Oil Company of Louisiana	400	22,279	
Total	23,482	23,077	627

Question 2-c. What percentage of motor fuel so purchased was sold under the brands of the Standard Oil Company (Indiana)?

Answer. All the motor fuel purchased was sold under Company's brand names.

Question 3. The name and address of the official of the Standard Oil Company (Indiana) conversant with such motor fuel exchanges and purchases.

Answer. Mr. F. G. McKeever, President, Pan American Southern Corporation, 122 East 42nd Street, New York, New York.

ANSWERS SUBMITTED ON BEHALF OF STANOLIND OIL AND GAS COMPANY

Question 1. Did the Standard Oil Company (Indiana) and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. Yes.

Question 1-a. With what companies were such exchanges carried on?

Answer. Standard Oil Company of Louisiana.

Question 1-b. What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer.

DELIVERIES BY STANOLIND OIL AND GAS COMPANY

[50-gallon barrels]

	Year 1935	Year 1936	Year 1937
Delivered to:			
Standard Oil Company of Louisiana	20,151		

DELIVERIES BY THE FOLLOWING TO STANOLIND OIL AND GAS COMPANY

	Year 1935	Year 1936	Year 1937
Received from:			
Standard Oil Company of Louisiana	20,193		

Difference of 42 barrels purchased from the Standard Oil Company of Louisiana to equalize the quantities of gasoline received and delivered.

Question 1-c. What percentage of the motor fuel received on such exchanges was sold under the brands of the Standard Oil Company (Indiana)?

Answer. All gasoline received under this exchange agreement was sold under the brands of the Pan American Petroleum Corporation (Delaware).

Question 3. The name and address of the official of the Standard Oil Company (Indiana) conversant with such motor fuel exchanges and purchases.

Answer. Mr. F. O. Prior, President, Stanolind Oil and Gas Company, Philcade Building, Tulsa, Oklahoma.

ANSWERS SUBMITTED ON BEHALF OF UTAH OIL REFINING COMPANY

Question 1. Did the Standard Oil Company (Indiana) and its domestic subsidiaries, in the years 1935, 1936 and 1937, engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer. Yes.

Question 1-a. With what companies were such exchanges carried on?

Answer. Shell Oil Company.

Sinclair Refining Company.

Question 1-b. What quantities (in barrels) were exchanged with each company during each of the years indicated?

Answer.

DELIVERIES BY UTAH OIL REFINING COMPANY

[50-gallon barrels]

	Year 1935	Year 1936	Year 1937
Delivered to:			
Shell Oil Company.....	96,095	104,584	123,818
Sinclair Refining Company.....	69,582	91,027	115,245
Total.....	165,677	195,611	239,063

DELIVERIES BY THE FOLLOWING TO UTAH OIL REFINING COMPANY

Received from:			
Shell Oil Company.....	89,908	118,141	120,983
Sinclair Refining Company.....	64,588	95,688	113,652
Total.....	154,496	213,829	234,635

Differences between quantities shipped and quantities received were carried forward from year to year.

Question 1-c. What percentage of the motor fuel received on such exchanges was sold under the brands of the Standard Oil Company (Indiana)?

Answer. All of the first and second structure gasoline received by Utah Oil Refining Company under the above exchange agreements was sold by it under its own brands, i. e., Pep 88 Ethyl and Pep 88. The third structure gasoline so exchanged was sold under the brand "Stanolind" which is the brand name of their third structure gasoline.

Question 3. The name and address of the official of the Standard Oil Company (Indiana) conversant with such motor fuel exchanges and purchases.

Answer. Mr. M. J. Greenwood, Vice President, Utah Oil Refining Company, Salt Lake City, Utah.

THE STANDARD OIL COMPANY

(An Ohio Corporation)

SUPPLY AND TRANSPORTATION DEPARTMENT

Midland Building

Cleveland, Ohio, February 2, 1939.

In re: Exchanges of Motor Fuels.

DEPARTMENT OF JUSTICE,

Washington, D. C.

(Attention: Mr. Therman Arnold, Assistant Attorney General.)

GENTLEMEN: We are in receipt of your letter of November 12, 1938 regarding exchanges of motor fuels between our company and other companies during the years 1935, 1936 and 1937, and have accumulated the information requested in your letter.

While we have had exchange arrangements with several companies during the years in question, the exchange accounts have not been necessarily balanced at the end of each calendar year, and any quantity of motor fuels due either party in connection with the exchange was, of course, carried over into the next year's figures. However, our receipts in barrels (42 U. S. gallons) of motor fuels on these exchanges have been as follows:

	1935	1936	1937
Pure Oil Company.....	755,204	843,320	917,377
Ashland Refining Co.....	255,319	267,793	269,336
Socony-Vacuum Oil Co.....	153,052	237,744	294,510
Gulf Refining Corp.....			37,390
Theisen-Clemens Co.....			6,957

The motor fuels delivered to us on exchange by the above companies had to comply with our own special specifications and necessary inspections were made by us either at the point of manufacture or point of delivery to see that our specifications were fully complied with. Special blending materials required to meet our specifications usually were blended in the product at the point of manufacture, although sometimes at the point of delivery. On the other hand, motor fuels delivered by us to the above companies on exchange usually differed from the specifications fixed by us for motor fuels which we received from such companies.

With respect to the purchase of motor fuels by our company during the years in question, we purchased a relatively small portion of our sales requirements of motor fuels in the years 1935, 1936, and 1937. Most of these purchases comprised so-called "third grade gasoline". The purchases during the years in question were as follows:

	1935	1936	1937
Ashland Oil & Refining Co.....	23,977	4,825	None
James B. Berry Sons' Co., Inc.....	20,120	368	None
Wolverine Oil Company.....	8,011	None	None
Pennsylvania Refining Company.....	6,661	None	None
Ultra. Penn Refining Company.....	2,281	None	None
Valvoline Oil Company.....	2,548	None	None
Elk Refining Company.....	9,276	None	None
Daugherty Refinery.....	3,528	None	None
Franklin Creek Refining Company.....	771	None	None
Continental Oil Company.....	286	None	None
Superior Oil Works.....		192	None

With only minor exceptions all of the motor fuels received by us on exchange, or purchased by us, during the years in question were re-sold under the brand names of our company or those of its subsidiaries.

In response to the third question of your letter, such motor fuel exchanges and purchases were handled by this company's Supply and Transportation Department, of which Mr. S. A. Swensrud is the manager.

Yours very truly,

THE STANDARD OIL COMPANY (OHIO),
By SAMUEL H. ELLIOTT.
DLP.

- SHE:DLP

STANDARD OIL COMPANY OF NEW JERSEY,
26 BROADWAY,
New York, N. Y., November 17, 1938.

Your Reference: HBC 60-57-M.

The ATTORNEY GENERAL,
Department of Justice,
Washington, D. C.

DEAR SIR: The receipt of Mr. Thurman Arnold's letter of November 12 addressed to the Standard Oil Company (New Jersey) is acknowledged. The Standard Oil Company (New Jersey) itself does not make any exchanges of motor fuel with other companies and does not purchase motor fuel. It has urged its subsidiaries who may have exchanged or purchased motor fuel to assemble the requested data which it is believed can be forwarded shortly.

Yours very truly,

EDWIN S. HALL.

ESH MF.

EDWIN S. HALL

26 BROADWAY
New York, January 9, 1939.

Your Reference H.B.C. 60-57-M.

The ATTORNEY GENERAL,
Department of Justice,
Washington, D. C.

SIR: The Standard Oil Company (New Jersey) has brought to the attention of its domestic subsidiaries Mr. Thurman Arnold's letter of November 17, 1938 asking if the Standard Oil Company (New Jersey) and its domestic subsidiaries in the years 1935, 1936, and 1937 engaged in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel.

For convenience and to avoid a multiplicity of correspondence, I have assembled here the replies of Standard Oil Company of New Jersey, Standard Oil Company of Pennsylvania, Standard Oil Company of Louisiana and the Huasteca Petroleum Company. Those companies did engage in exchange of motor fuel with other companies marketing branded motor fuel and there follows the requested information with respect to those exchanges.

The Standard Oil Company of New Jersey engaged in exchanges with the Pure Oil Company, the Socony-Vacuum Oil Company and the Shell Eastern Petroleum Products Corporation. The amount of motor fuel received under such exchange agreements and the amounts sold under the advertised brands of the Standard Oil Company of New Jersey or affiliates were as follows:

[42-gallon barrels]

FROM PURE OIL COMPANY

Year	Amount received	Percentage sold under S. O. Co. of New Jersey advertised brands
1935.....	120, 198	100%
1936.....	66, 301	100%
1937.....	75, 648	100%

FROM SOCONY-VACUUM OIL COMPANY

1935.....	80, 978	100%
1936.....		
1937.....		

FROM SHELL EASTERN PETROLEUM PRODUCTS CORP.

1935.....	484	100%
1936.....	2, 015	100%
1937.....		

The Standard Oil Company of Pennsylvania engaged in exchanges with the Sinclair Refining Company, Socony-Vacuum Oil Company, Pennzoil Company and the Atlantic Refining Company. The amount of motor fuel received under such exchange agreements and the amounts sold under the advertised brands of the Standard Oil Company of Pennsylvania or affiliates were as follows:

[42-gallon barrels]

FROM SINCLAIR REFINING COMPANY

Year	Amount received	Percentage sold under S. O. Co. of New Jersey advertised brands
1935	698, 507	98%
1936	772, 221	98%
1937	947, 017	81%

FROM SOCONY-VACUUM OIL COMPANY

1935	779, 946	99%
1936	927, 268	85%
1937	906, 322	95%

FROM PENNZOIL COMPANY

1935	240, 813	90%
1936	299, 177	77%
1937	390, 691	78%

FROM ATLANTIC REFINING COMPANY

1935	94, 964	100%
1936	85, 544	100%
1937	103, 940	100%

The Standard Oil Company of Louisiana engaged in an exchange with the Stanolind Oil and Gas Company. The amount of motor fuel received under such exchange agreement and the amount sold under the advertised brands of the Standard Oil Company of Louisiana or affiliates were as follows:

[42-gallon barrels]

FROM STANOLIND OIL AND GAS COMPANY

Year	Amount received	Percentage sold under S. O. Co. of New Jersey advertised brands
1935	23, 989	100%
1936		
1937		

The Huasteca Petroleum Company engaged in an exchange with the Standard Oil Company of California. The amount of motor fuel received under such exchange agreement for sale in the United States and the amount sold in the United States under the brands of the Standard Oil Company of New Jersey or affiliates were as follows:

[42-gallon barrels]

Year	Amount received	Percentage sold under S. O. Co. of New Jersey advertised brands
1935		
1936	58, 540	100%
1937	71, 922	100%

All the motor fuel received from other companies by virtue of the above exchanges which has been sold under advertised brands has had added to it solvent oil manufactured for and furnished by the receiving company or solvent oil fully meeting the receiving company's established specifications. The combination of motor fuel and this solvent oil is covered by a patent and used in this country only by the domestic subsidiaries of the Standard Oil Company (New Jersey). Thus the motor fuel received under the above exchanges and sold by such domestic subsidiaries under their advertised brands for consumer distribution is distinctive from motor fuel sold by any other manufacturer.

Mr. Arnold also asked if the Standard Oil Company (New Jersey) and its domestic subsidiaries in the years 1935, 1936 and 1937 purchased motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel. The Standard Oil Company of New Jersey, Standard Oil Company of Pennsylvania and the Standard Oil Company of Louisiana did make purchases of motor fuel during the years mentioned from companies marketing branded motor fuel, the details of which follows:

[42-gallon barrels]

PURCHASES BY STANDARD OIL COMPANY OF NEW JERSEY

From	Date	Quantity	Percentage sold under S. O. Co. of New Jersey advertised brands
Socony-Vacuum.....	1935	77,877	100%
Chalmette.....	1936	58,695	100%
Socony-Vacuum.....	1937	2,381	100%
Arkansas Fuel Oil.....	1937	164,135	100%

PURCHASES BY STANDARD OIL COMPANY OF PENNSYLVANIA

Pennzoil.....	1937	10,817	100%
J. B. Berry.....	1937	3,790	100%

PURCHASES BY STANDARD OIL COMPANY OF LOUISIANA

Atlas.....	1936	138,293	97.5%
Atlas.....	1937	274,571	95.2%
Mid-Continent.....	1937	34,735	94.1%
Lion.....	1937	73,309	83.2%

All of the purchased motor fuel which was sold under the advertised brands of the Standard Oil Company of New Jersey or affiliates had added to it before sale solvent oil and "Q" brand anti-knock compound to conform to our specifications and thus became distinctive from motor fuel sold by any other manufacturer.

The name of the official of the Standard Oil Company (New Jersey) conversant with much motor fuel exchanges and purchases is requested. No official of that company is fully conversant with the exchanges and purchases. May I suggest that if further information with respect thereto is desired, the request be addressed to me so that the information may be assembled from the several companies as expeditiously as circumstances will permit.

Yours very truly,

ESH MF

EDWIN S. HALL.

GEORGE W. RAY, JR.
Attorney

THE TEXAS COMPANY

LEGAL DEPARTMENT

135 East 42d Street, New York

MARCH 9TH, 1939.

The ATTORNEY GENERAL,
Department of Justice, Washington, D. C.

DEAR SIR: Please refer to your file HBC-60-57-M, and particularly to letter of Mr. Thurman Arnold to The Texas Corporation dated November 10th, 1938 and my reply to Mr. Arnold of November 16th, 1938.

The information requested by you is set forth below:

MOTOR FUEL EXCHANGES

Question: (1) Did The Texas Corporation and its domestic subsidiaries in the years 1935, 1936 and 1937 engage in the exchange of motor fuel (requiring no further processing or blending for consumer distribution) with other companies marketing branded motor fuel?

Answer: The Texas Corporation did not. Some of the domestic subsidiaries of The Texas Corporation did.

Question: (a) With what companies were such exchanges carried on?

(b) What quantities (in barrels) were exchanged with each company during each of the years indicated?

(c) What percentage of the motor fuel received on such exchanges was sold under the brands of The Texas Corporation?

Answer: The information requested is set forth in the following tables:

Exchanges and loans of motor fuel, year 1935

[Barrels of 42 U. S. gallons each]

	Receipts from Others by Subsidiaries of T. T. Corp. on Exchanges and Loans				Deliveries by Subsidiaries of T. T. Corp. to Others on Exchanges and Loans
	Total	Further Processed or Blended before Marketing	Marketed without Change under Texas Trade Names		
			Quantity	% of Total	
Associated Oil Company.....	10,426	0	10,426	100.00	(1)
Continental Oil Company.....	17,253	0	17,253	100.00	13,345
General Petroleum Corp.....	114,964	86,536	28,428	24.73	106,400
Magnolia Petroleum Co.....	88,257	0	88,257	100.00	88,465
Richfield Oil Corp.....	56,758	40,857	15,901	28.01	52,535
Shell Oil Company.....	96,703	25,880	70,823	73.24	146,094
Skelly Oil Company.....	139,701	0	139,701	100.00	139,056
Socony-Vacuum Oil Co.....	7,032	0	7,032	100.00	55,185
Standard Oil Co. of Calif.....	18,343	10,951	7,392	40.30	42,258
Standard Oil Co. of Ky.....	8,289	0	8,289	100.00	11,947
Sunset Pacific Oil Co.....	425	0	425	100.00	210
Union Oil Company.....	67,704	0	67,704	100.00	65,303
Total 1935.....	625,855	164,224	461,631	73.76	720,798

¹ Delivery made by T. T. Co. in 1934.

NOTE.—Quantities shown are actual receipts and deliveries, and no attempt has been made to reconcile opening and closing balances or to explain book adjustments involving other product transactions.

Data furnished from accounting records of The Texas Company (Delaware), The Texas Company (California), and Indian Refining Company.

Exchanges and loans of motor fuel, year 1936

[Barrels of 42 U. S. gallons each]

	Receipts from Others by Subsidiaries of T. T. Corp. on Exchanges and Loans				Deliveries by Subsidiaries of T. T. Corp. to Others on Exchanges and Loans
	Total	Further Processed or Blended before Marketing	Marketed without Change under Texas Trade Names		
			Quantity	% of Total	
Continental Oil Company.....	25,722	0	25,722	100.00	26,154
General Petroleum Corp.....	121,649	112,174	9,475	7.79	124,039
Magnolia Petroleum Co.....	90,310	0	90,310	100.00	90,580
Richfield Oil Corp.....	43,349	42,821	528	1.22	55,002
Shell Oil Company.....	97,131	59,775	37,356	38.46	116,929
Shell Petroleum Corp.....	43,644	0	43,644	100.00	43,629
Sinclair Refining Co.....	67,699	0	67,699	100.00	67,701
Skelly Oil Company.....	122,519	0	122,519	100.00	124,951
Socony-Vacuum Oil Co.....	68,122	0	68,122	100.00	19,969
Standard Oil Co. of Calif.....	80,025	79,032	993	1.24	95,434
Standard Oil Co. of Ky.....	6,831	0	6,831	100.00	3,173
Union Oil Company.....	180,658	128,614	52,044	28.81	73,525
Total 1936.....	947,659	422,416	525,243	55.43	841,086

¹ T. T. Co. purchased 15 barrels from Shell to balance.

NOTE.—Quantities shown are actual receipts and deliveries, and no attempt has been made to reconcile opening and closing balances or to explain book adjustments involving other product transactions.

Data furnished from accounting records of The Texas Company (Delaware), The Texas Company (California), and Indian Refining Company.

Exchanges and loans of motor fuel, year 1937

[Barrels of 42 U. S. gallons each]

	Receipts from Others by Subsidiaries of T. T. Corp. on Exchanges and Loans				Deliveries by Subsidiaries of T. T. Corp. to Others on Exchanges and Loans
	Total	Further Processed or Blended before Marketing	Marketed without Change under Texas Trade Names		
			Quantity	% of Total	
Continental Oil Company.....	28,092	0	28,092	100.00	29,151
General Petroleum Corp.....	56,072	53,829	2,243	4.00	33,674
Magnolia Petroleum Co.....	108,092	0	108,092	100.00	107,452
Richfield Oil Corp.....	26,299	20,112	187	.92	11,698
Shell Oil Company.....	121,950	121,950	0	.00	145,704
Shell Petroleum Corp.....	0	0	0	.00	305,755
Sinclair Refining Co.....	69,512	0	69,512	100.00	69,330
Skelly Oil Co.....	134,100	0	134,100	100.00	131,252
Standard Oil Co. of Calif.....	134,730	134,730	0	.00	150,973
Union Oil Co.....	147,835	0	147,835	100.00	245,911
Total 1937.....	820,682	330,621	490,061	59.71	1,230,900

¹ Returned to T. T. Co. in 1938.

NOTE.—Quantities shown are actual receipts and deliveries, and no attempt has been made to reconcile opening and closing balances or to explain book adjustments involving other product transactions.

Data furnished from accounting records of The Texas Company (Delaware), The Texas Company (California), and Indian Refining Company.

MOTOR FUEL PURCHASES

Question: (2) Did the Texas Corporation and its domestic subsidiaries in the years 1935, 1936 and 1937 purchase motor fuel (requiring no further processing or blending for consumer distribution) from other companies marketing branded motor fuel for resale by the company under its own brands?

Answer. The Texas Corporation did not. Some of its domestic subsidiaries did.¹

Question. (a) From what companies were such purchases made?

(b) What quantities (in barrels) were purchased from each of the companies during each of the years indicated?

(c) What percentage of motor fuel so purchased was sold under the brands of The Texas Corporation?

Answer. The information requested is set forth in the following tables:

Purchases of motor fuel, year 1935

[Barrels of 42 U. S. gallons each]

	Total	Further Processed or Blended before Marketing	Marketed without Change under Texas Trade Names	
			Quantity	% of Total
Arrow Ref. & Producing Co.....	2,865	2,865	0	.00
Bennett Refining Co.....	1,169	1,169	0	.00
East Texas Refining Co.....	5,682	2,656	3,026	53.26
Hurricane Petroleum Corp.....	35,071	2,289	32,782	93.47
McMurrey Refining Co.....	1,940	1,940	0	.00
Oil Refineries, Inc.....	20,956	10,389	10,567	50.42
Pacific Coast Petroleum Agency.....	142,558	0	142,558	100.00
Premier Oil Ref. Co. of Texas.....	10,199	10,199	0	.00
Republic Oil Co.....	219,862	219,862	0	.00
Solvex Refineries, Inc.....	3,839	3,839	0	.00
Standard Oil Co. of Calif.....	137,635	16,539	121,095	87.98
Trio Refining Company.....	34,853	7,218	27,635	79.29
United Refining Co.....	10,291	0	10,291	100.00
Utah Oil Refining Co.....	222,763	0	222,763	100.00
Total 1935.....	849,683	278,965	570,718	67.17

NOTE.—Data furnished from accounting records of The Texas Company (Delaware), The Texas Company (California), and Indian Refining Company.

Purchases of motor fuel, year 1936

[Barrels of 42 U. S. gallons each]

	Total	Further Processed or Blended before Marketing	Marketed without Change under Texas Trade Names	
			Quantity	% of Total
Bennett Refining Company.....	1,108	1,108	0	.00
R. R. Bush Oil Co.....	66,813	66,813	0	.00
Cantlay & Tanzola, Inc.....	2,195	2,195	0	.00
O. H. Collinge Inc.....	1,949	1,949	0	.00
Envoy Petroleum Co.....	1,244	1,244	0	.00
Estado Petroleum Corp.....	11,574	11,574	0	.00
General American Oil Co.....	86,558	3,440	83,118	96.03
Gilliland Refining Co.....	33,626	7,746	25,880	76.96
Harbor Refining Co.....	20,294	20,294	0	.00
Hurricane Petroleum Corp.....	96,955	68,283	28,672	29.57
Kilgore Refining Co.....	5,729	5,729	0	.00
F. R. Long, Inc.....	28,115	28,115	0	.00
M. M. McCallen Refining Co.....	127,167	127,167	0	.00
McMillen Petroleum Corp.....	17,863	17,863	0	.00
McMurrey Refining Co.....	18,347	18,347	0	.00
Mid-Continent Pet. Corp.....	50,022	0	50,022	100.00
Operators Oil & Refining Co.....	24,906	24,906	0	.00
Olympic Refining Co.....	5,462	5,462	0	.00
Premier Oil Ref. Co. of Texas.....	388	388	0	.00
Socal Oil Refining Co.....	18,507	18,507	0	.00
Solvex Refineries, Inc.....	92,310	92,310	0	.00
Tower Refining Co.....	16,243	16,243	0	.00
Trinity Refining Co.....	3,822	3,822	0	.00
United Refining Co.....	72,499	0	72,499	100.00
Utah Oil Refining Co.....	260,408	0	260,408	100.00
Total 1936.....	1,064,104	543,505	520,599	48.92

NOTE.—Data furnished from accounting records of The Texas Company (Delaware), The Texas Company (California), and Indian Refining Company.

¹ It is not known whether all the companies from which purchases were made marketed motor fuel under their own brands. Therefore, in responding to questions regarding purchases, a complete list of companies from which purchases were made is set forth, irrespective of whether or not the selling company marketed branded motor fuel.

Purchases of motor fuel, year 1937

[Barrels of 42 U. S. gallons each]

	Total	Further Processed or Blended before Marketing	Marketed without Change under Texas Trade Names	
			Quantity	% of Total
Arkansas Fuel Oil Co.....	226,531	10,216	216,315	95.49
Bell Oil & Gas Co.....	29,250	0	29,250	100.00
Cascade Refining Co.....	10,500	10,500	0	.00
Cities Service Oil Co.....	73,551	0	73,551	100.00
Danciger Oil & Ref. Co.....	2,844	2,844	0	.00
Deep Rock Oil Corp.....	25,631	0	25,631	100.00
Eastern States Pet. Co.....	295,901	65,276	230,625	77.94
East Texas Refining Co.....	19,985	0	19,985	100.00
East-West Refining Co.....	10,920	10,920	0	.00
Elk Refining Company.....	44,741	0	44,741	100.00
Envoy Petroleum Co.....	1,252	1,252	0	.00
Exeter Refining Co.....	24,983	24,983	0	.00
Fletcher Oil Co.....	23,965	23,965	0	.00
General American Oil Co.....	12,791	0	12,791	100.00
General American Pet. Corp.....	6,699	6,699	0	.00
Globe Oil & Ref. Co.....	99,874	74,840	25,034	25.07
Harbor Refining Co.....	34,020	34,020	0	.00
Hurricane Petroleum Corp.....	227,863	69,283	158,580	69.59
M. M. McCallen Ref. Co.....	225,065	225,065	0	.00
McMurrey Petroleum Corp.....	15,409	15,409	0	.00
Operators Oil & Refining Co.....	6,909	6,909	0	.00
Pacific Coast Petroleum Agency.....	4,978	4,978	0	.00
Pan American Pet. Corp.....	146,330	0	146,330	100.00
Premier Ref. Co. of Texas.....	973	973	0	.00
Shell Petroleum Corp.....	9,840	9,840	0	.00
Sinclair Refining Co.....	73,193	52,003	21,190	28.95
Socal Oil Ref. Co.....	12,491	12,491	0	.00
Solvex Refineries, Inc.....	52,162	52,162	0	.00
Tower Refining Co.....	18,311	18,311	0	.00
United Refining Co.....	204,430	0	204,430	100.00
Utah Oil Refining Co.....	270,842	0	270,842	100.00
Total 1937.....	2,212,234	732,939	1,479,295	66.87

NOTE.—Data furnished from accounting records of The Texas Company (Delaware), The Texas Company (California), and Indian Refining Company.

PERSONS HAVING CHARGE OF EXCHANGES AND PURCHASES

Question. (3) The name and address of the official of The Texas Corporation conversant with such motor fuel exchanges and purchases.

Answer. R. D. Cottingham, Assistant to Vice President, The Texas Company (Delaware), 135 East 42nd Street, New York, N. Y.; L. R. Holmes, Vice President, The Texas Company (California), 929 South Broadway, Los Angeles, California.

* * * * *

ADDITIONAL INFORMATION

In order that the replies above given may be properly understood, it is essential that further information be given, and that this information be kept in mind.

The information below given is an integral part of the statements above set forth. The statements should not be used unless this additional information is incorporated in any report of which the statements form a part.

REASONS FOR EXCHANGES OF MOTOR FUEL

Exchanges of motor fuel have been made because

(1) Certain outlets could be supplied at a lower cost of transportation from refineries from which exchanged material was obtained than from Company-owned refineries or terminals.

(2) The Company has been able to sell motor fuel over the years at constantly decreasing prices to the extent that it has been able to reduce its costs of doing business. Motor fuel exchanges have been one of the media employed for cost reduction.

REASONS FOR PURCHASES OF MOTOR FUEL

Purchases of motor fuel have been made because

(1) Lack of capacity to manufacture full domestic and export requirements of sales organizations has necessitated augmenting manufacture and production by purchasing.

(2) It has been necessary to protect adequate refinery and terminal working stocks.

(3) There has been an expansion of distribution to outlets that could be supplied at a lower cost of transportation from refineries from which purchased than from owned refineries or terminals.

(4) Demand for certain motor fuel requirements could be met with purchased products at lower cost of transportation from refiners from which purchased than from owned refineries or terminals.

QUALITY OF PRODUCTS RECEIVED ON EXCHANGE OR BY PURCHASE: SPECIFICATIONS

Quantities of product received on exchanges and the quantities of product purchased have been manufactured to meet specifications designated by the receiving or purchasing company, i. e., The Texas Company (Delaware), The Texas Company (California), or Indian Refining Company.

Exchanges offering material financial advantages have been declined by Texas due to the other companies' inability or unwillingness to manufacture products of specifications designated by Texas.²

An exchange agreement entered into has been cancelled because of the other company's refusal or inability to meet desired improvements in specifications designated by Texas. Likewise, purchase contracts have been cancelled when it was found that the sellers were either unable or for other reasons failed to meet specifications designated by Texas.

SUPERVISION OF QUALITY OF PRODUCTS

In respect to exchanges, the quality of the product received is checked by Texas as follows:

(a) Inspectors employed by Texas visit the plants from which products are supplied to Texas and at such locations make inspection of product shipped for account of Texas and facilities through which such products are handled. Inspections of this character are made at the time the exchange becomes operative and periodically thereafter.

(b) The supplying companies are required to submit to laboratories of Texas at periodic intervals for examination samples of product shipped for account of Texas.

(c) Certain of Texas's bulk stations receiving products from other companies under an exchange arrangement submit samples taken from tank cars received from supplying companies to laboratories of Texas at designated intervals for examination.

In respect to purchases, the quality is checked as follows:

(a) Inspectors employed by Texas visit sellers' plants and there test the product being shipped for account of Texas. In cases of cargo purchases, the inspector also submits samples to Texas's laboratory for testing before acceptance. In instances where Texas does not have an inspector available for handling of purchased cargo, Charles Martin & Company or some other licensed inspector is employed to inspect for quantity and quality;

(b) Where purchases from the same seller extend over a period of time, Texas's inspector is not retained at the seller's plant, but in order that Texas may check the materials shipped for Texas's account the vendor is required to send samples at regular intervals to Texas's laboratory; and

(c) In addition, bulk plant employees of Texas's Sales Department take samples from tank car receipts and ship them to Texas's laboratory for inspection.

SELECTION OF SUPPLIERS

In arranging for exchanges of motor fuel or for purchase of motor fuel, Texas selects responsible suppliers who can be depended upon to supply material of specifications designated by Texas.

² The term "Texas" is here used in a general sense, and means the subsidiary of The Texas Corporation receiving on exchange or purchasing the material.

RESALE UNDER TEXAS'S BRANDS

Material received on exchange or by purchase is resold under Texas's brand when the material thus obtained conforms to the specifications of such branded material manufactured by Texas. In consequence of the procedure above outlined, Texas is assured that the products received on exchange or by purchase fully meet the specifications of its branded materials before they are sold under the trade names of Texas.

USED FOR BLENDING

Much of the material obtained, as the tables above indicate, is used as a blending material, and is not resold prior to further processing or blending.

Very truly yours,

GEORGE W. RAY, Jr.,
Attorney.

GWR-ARL.

Tide Water Associated Oil Company and its domestic subsidiaries

- Exchanges of motor fuel with other companies marketing branded motor fuel (in which exchanges the material received by Tide Water Associated Oil Company or its subsidiaries required no further processing or blending for consumer distribution)

[All amounts are in barrels of 42 U. S. gallons each]

Name of company with whom exchange was made	Receipts			Deliveries		
	1935	1936	1937	1935	1936	1937
By Associated Division of Tide Water Associated Oil Company:						
General Petroleum Corporation.....	307,848	782,302	793,796	292,307 20	821,122	908,540
Hancock Oil Company.....						
Pacific Coast Petroleum Agency.....	45,116	662		40,228		
Richfield Oil Company of California.....	474,883	273,125	15,246	467,494	299,089	86,907
Rio Grande Oil Company.....			1,237			
Shell Oil Company.....			5,010	1,723	1,426	480
Signal Oil Company.....				1		
Standard Oil Company of California.....	1,560	12	5,569	1,560	12	24
Sunset Oil Company.....	72,441	7,496		21,992	56,977	
Sunset Oil Company of Nevada.....	52,540			34,746		
Union Oil Company of California.....	15,175	7,465	5,358	13,158	7,464	5,059
By Tide Water-Mid-Continent Division of Tide Water Associated Oil Company:						
None.						
By Tide Water—Eastern Division of Tide Water Associated Oil Company:						
Atlantic Refining Company ¹		30,318	119,247		26,867	143,446
Cities Service Oil Company ²		873			873	
Pure Oil Company.....		125,065	266,112		108,517	316,043
Total Tide Water Associated Oil Company.....	969,563	1,227,318	1,211,575	873,229	1,322,347	1,460,499

¹ Written in, 124,981.

² Small quantities of lubricating oil and KAE Compound furnished by Tide Water Associated Oil Company to Atlantic Refining Company for that purpose, were added to the material before it was received from Atlantic Refining Company, so that it would conform with the product distributed by the Tide Water—Eastern Division of Tide Water Associated Oil Company. In some instances it was also necessary to add dye to the material received from Atlantic Refining Company, so that it would conform in color to the colored branded product of Tide Water Associated Oil Company.

³ Small quantities of lubricating oil, KAE Compound and dye were added by Tide Water Associated Oil Company to the material received from Pure Oil Company, so that it would conform with the product distributed by the Tide Water—Eastern Division of Tide Water Associated Oil Company.

2. Purchases of motor fuel from other companies marketing branded motor fuel, for resale by Tide Water Associated Oil Company under its own brands (in which purchases the material received required no further processing or blending for consumer distribution)

Name of company from whom purchased	1935	1936	1937
By Associated Division of Tide Water Associated Oil Company:			
Asiatic Petroleum Company	608		
Associated Oil & Gas Company			22
O. F. Collinge	6,947	10,711	
General Petroleum Corporation		354,875	480,952
Home Oil Distributors			244
Lake View Oil & Refining Company	8,413		
Los Nietos Producing & Refining Company	1,409	115,149	119,715
Muller Brothers		2,224	
Norwalk Company, The	6,604		60,365
Pacific Coast Petroleum Agency	204,976	39,961	
Pierce Oil Company	162,335		
Seaside Oil Company	99,698	81,213	91,334
Shell Oil Company		9	506
Socony-Vacuum Oil Company		1	
Standard Oil Company	102,265	23,921	414
Sunset Oil Company	56,348		
Texas Company, The	65		
Union Oil Company	81,351	20	303
Western Oil & Refining Company	22		
By Tide Water-Mid-Continent Division of Tide Water Associated Oil Company:			
Anderson-Prichard Refining Company ¹		8,778	11,772
Barnsdall Refining Company	195		
Bell Oil & Gas Company ¹	576	121	1,165
Cities Service Oil Company ¹	32		
Col-Tex Refining Company ¹		50	50
Deep Rock Oil Corporation		219	
Mid-Continent Petroleum Company		410	1,831
Phillips Petroleum Company ¹	171	223	394
Rock Island Refining Company ¹	12,839	6,142	2,326
Shell Petroleum Company ¹		39	85
Skelly Oil Company ¹	193		76
Socony-Vacuum Oil Company ¹	51	129	
Wilcox Oil & Gas Company	1,365		26,118
By Tide Water-Eastern Division of Tide Water Associated Oil Company:			
Bradford Oil Refining Company, Inc.	3,374	242	
Gulf Refining Company	1		
Pennsylvania Refining Company	143		
Pennsylvania Oil Products Refining Company	2,605	244	
Quaker State Oil Refining Corp.	436	1,165	198
Richfield Oil Corporation of N. Y.		190	
Socony-Vacuum Oil Company	1	104	
Texas Company, The	7	110	
Valvoline Oil Company	157		
United Refining Company ²			27,681
Total Tide Water Associated Oil Company	753,187	649,250	825,551

¹ Small quantities of KAE Compound and dye were added by Tide Water Associated Oil Company to some of the material purchased from these companies, so that it would conform with the product distributed by the Tide Water-Mid-Continent Division of Tide Water Associated Oil Company.

² Small quantities of lubricating oil, KAE Compound and dye were added by Tide Water Associated Oil Company to most of the material purchased from United Refining Company, so that it would conform with the product distributed by the Tide Water-Eastern Division of Tide Water Associated Oil Company.

JANUARY 17, 1939.

3. The names and addresses of the individuals of Tide Water Associated Oil Company conversant with the data furnished in answer to Questions No. 1 and No. 2 are:

Data furnished for Associated Division—

Mr. U. B. Boucke, Regional Comptroller, Tide Water Associated Oil Company, 79 New Montgomery Street, San Francisco, California.

Data furnished for Tide Water—Mid-Continent Division—

Mr. A. W. John, Chief Accountant, Tide Water Associated Oil Company, Philcade Building, Tulsa, Oklahoma.

Data furnished for Tide Water—Eastern Division—

Mr. R. W. Grunert, Assistant Chief Accountant, Tide Water Associated Oil Company, 17 Battery Place, New York City.

NOTE.—The tabulations shown on pages 1 and 2 hereof furnish the data requested in questions 1 (a), 1 (b), 2 (a) and 2 (b). With respect to questions 1 (c) and 2 (c), it is regretted that it is not possible to determine what percentage of the motor fuel received in exchanges nor what percentage of the motor fuel purchased was sold under the brands of Tide Water Associated Oil Company.

NOTE.—While the data furnished is all shown as exchanges and purchases by Tide Water Associated Oil Company, it should be noted that no such transactions were made by that Company prior to November 30, 1936. On that date Associated Oil Company and Tide Water Oil Company were merged with and into Tide Water Associated Oil Company. Prior thereto the transactions appearing under "Associated Division" were conducted by Associated Oil Company, and after then by Tide Water Associated Oil Company. During 1935 and until July 31, 1936, the transactions appearing under "Tide Water—Mid-Continent Division" were conducted by Tide Water Oil Company (Oklahoma); from July 31, 1936 until November 30, 1936 by Tide Water Oil Company (Delaware) and after November 30, 1936, by Tide Water Associated Oil Company. During 1935 and until August 23, 1936, the transactions appearing under "Tide Water—Eastern Division" were conducted by Tide Water Oil Company (New Jersey); from August 23, 1936 until November 30, 1936 by Tide Water Oil Company (Delaware) and after November 30, 1936 by Tide Water Associated Oil Company.

JANUARY 17, 1939.

M. G. KERR, *Comptroller*.

UNION OIL COMPANY OF CALIFORNIA,
UNION OIL BUILDING,
Los Angeles, California, January 3, 1939.

Air Mail

The ATTORNEY GENERAL,
Department of Justice, Washington, D. C.

(Attention Mr. Thurman Arnold, Assistant Attorney General.)

DEAR SIR: Following our letter of November 30th and pursuant to your request contained in your letter of November 12, 1938, file HBC 60-57-M, we are attaching statements setting forth:

1. Exchange transactions of motor fuel requiring no further processing or blending for consumer distribution with other companies marketing blended motor fuel for the years 1935-6-7.
2. Purchases of motor fuel requiring no further processing or blending for consumer distribution from other companies marketing blended motor fuel, for resale by the Company under its own brands.

As to your question No. 3, all records in connection with the purchase and exchange of motor fuel are maintained in the Comptroller's office and any correspondence pertaining thereto should be addressed to the undersigned.

Yours very truly,

M. G. KERR, *Comptroller*.

Union Oil Company of California—Motor fuel delivered under exchange agreement with other companies marketing branded motor fuel, years 1935, 1936, 1937

	1935	1936	1937
	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>
Inside U. S. A.:			
Associated Oil Company-Tide Water Associated Oil Company.....	2,020.90	193.64	924.38
Continental Oil Company.....		53.69	
General Petroleum Corporation.....	646.83	156.81	7,511.64
Hancock Oil Company.....	7,612.82		
Richfield Oil Company-Richfield Oil Corporation.....	51,170.15	35,553.86	38,917.43
Rio Grande Oil Company.....	282,514.28	2,709.98	
Shell Oil Company.....	17,045.01	62,202.50	8,655.82
Standard Oil Company of California.....	8,864.22	6,172.19	385.83
The St. Helens Petroleum Company.....	771.74		
The Texas Company.....	53,483.65	60,616.55	152,787.52
Western Oil and Refining Company.....	50,133.95		
Northwest Emergency Pool No. 1 of 1934.....	21,378.73		
Northwest Emergency Pools Nos. 2 and 3 of 1935.....	203,868.70		
Total in U. S. A.....	699,510.98	167,659.22	209,182.62
U. S. Possessions:			
Hawaii:			
Associated Oil Company-Tide Water Associated Oil Com- pany.....	13,132.60	7,168.19	
Shell Oil Company.....	8,024.62	17,670.36	21,049.86
Alaska:			
General Petroleum Corporation.....	2.38		
Standard Oil Company of California.....	336.83	48.52	1,195.95
Panama Canal Zone:			
Shell Oil Company.....		1,104.76	2,899.31
Total in U. S. Possessions.....	21,496.43	25,991.83	25,145.12
Grand total.....	721,007.41	193,651.05	234,327.74

Union Oil Company of California—Motor fuel received under exchange agreement with other companies marketing branded motor fuel, years 1935, 1936, 1937

Company	1935	1936	1937
	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>
Inside U. S. A.:			
Associated Oil Company-Tide Water Associated Oil Company.....	2,002.38	22.29	
Continental Oil Company.....		53.69	
General Petroleum Corporation.....	540.02	47.38	150,310.48
Hancock Oil Company.....	7,609.49		
Richfield Oil Company-Richfield Oil Corporation.....	73,022.83	27,511.55	43,440.30
Rio Grande Oil Company.....	201,957.55	85,839.07	
Shell Oil Company.....	2,589.21	78,704.43	49,865.13
Standard Oil Company of California.....	7,485.19	25.93	385.83
The St. Helens Petroleum Company.....	771.73		
The Texas Company.....	65,302.68	22,378.79	157,231.05
Western Oil and Refining Company.....	50,139.69		
Northwest Emergency Pool No. 1 of 1934.....	6,029.55		
Northwest Emergency Pools Nos. 2 and 3 of 1935.....	203,868.70		
Total Inside U. S. A.....	621,319.02	214,583.13	401,232.79
U. S. Possessions:			
Hawaii:			
Associated Oil Company-Tide Water Associated Oil Com- pany.....	11,136.05	6,665.31	844.93
Shell Oil Company.....	7,400.12		26,035.17
Alaska:			
General Petroleum Corporation.....		2.38	
Standard Oil Company of California.....	373.21	19.93	1,188.17
Panama Canal Zone:			
Shell Oil Company.....		1,019.05	2,985.02
Total in U. S. Possessions.....	18,909.38	7,706.67	31,053.29
Grand total.....	640,228.40	222,289.80	432,286.08

The bulk of these transactions were at refineries and the motor fuel received thereunder may have been: (1) Shipped from the refinery in its original state, (2) commingled with stocks of motor fuel of our own manufacture, (3) commingled with motor fuel blending stocks or stocks for further processing of our own manufacture.

Union Oil Company of California—Motor fuel purchased from other companies marketing branded motor fuel, years 1935, 1936, 1937

Vendor	1935	1936	1937
Delivered to Marketing Stations:			
Inside U. S. A.:	<i>Barrels</i>	<i>Barrels</i>	<i>Barrels</i>
Continental Oil Company.....		52.98	
M. M. McCallen Refining and Producing Company.....	9,718.40		
Shell Oil Company.....	58.71	3.40	3.50
Standard Oil Company of California.....	606.22	35.57	
The Texas Company.....	35.33		
Western Oil and Refining Company.....	29,537.32	4,649.40	
Pacific Coast Petroleum Agency.....	¹ 25,822.67	² 6.07	
Total Inside U. S. A.....	65,778.65	4,747.42	3.57
In U. S. Possessions:			
Alaska: Standard Oil Company of California.....	.71		
Panama Canal Zone:			
Shell Oil Company.....	682.21		
The Texas Company.....	347.14		
Total in U. S. Possessions.....	1,030.06		
Total Delivered to Marketing Stations.....	66,808.71	4,747.42	3.57
The foregoing does not include purchases of motor fuel delivered directly to Union Oil Company's Refineries.....	362,284.86	179,146.86	150,131.81

Such motor fuel may have been: (1) Shipped from the refinery in its original state, (2) commingled with stocks of motor fuel of our own manufacture, (3) commingled with motor fuel blending stocks or stocks for further processing of our own manufacture.

¹ Delivered direct by refiner members of the Agency on its order.

² Final settlement 1935 purchase.

EXHIBIT No. 1322¹

A. A. STAMBAUGH,
Vice President.

THE STANDARD OIL COMPANY (An Ohio Corporation) SALES DEPARTMENT

CLEVELAND, O., October 19, 1939.

Senator JOSEPH C. O'MAHONEY,
Chairman, T. N. E. C. Committee,
Room 232, Senate Office Building,
Washington, D. C.

DEAR SENATOR: The other day you very kindly extended to us the privilege of submitting a statement in reply to the testimony of Mr. G. B. Ingram, President of The New Deal Oil Company, Canton, Ohio, to be made part of the verbatim record of the proceedings of your committee.

You will recall that Mr. Ingram made certain charges of conspiracy to fix prices against our company, which we regarded as so serious and unwarranted as to demand an answer. I am enclosing herewith the statement in question, with the request that it be inserted in the record of your committee proceedings.

Thanking you again for your courtesy, I am

Sincerely yours,

A. A. STAMBAUGH.

¹ An affidavit of Mr. Stambaugh's statement, marked "Exhibit No. 1354", is printed immediately following in connection with this exhibit.

STATEMENT OF A. A. STAMBAUGH, VICE PRESIDENT OF THE STANDARD OIL COMPANY (AN OHIO CORPORATION), IN REPLY TO TESTIMONY OF GEORGE B. INGRAM, BEFORE THE TEMPORARY NATIONAL ECONOMIC COMMITTEE

George B. Ingram, in his testimony given before the Committee on October 11, 1939, made certain charges against The Standard Oil Company, an Ohio corporation, which, although unsupported by any facts testified to by him, are sufficiently serious to demand a reply.

Mr. Ingram testified that The Standard Oil Company of Ohio and The Pennzoil Company had conspired in the past and were now conspiring to fix the prices for their products in Ohio, and more specifically, in Canton, Ohio.

The only facts testified to by him in support of his charge of price fixing between the two companies were as follows:

1. The Pennzoil Company, in its contract with Ingram, dated October 26, 1934, provided that its prices to him as a jobber for the ensuing year should bear a certain fixed relationship, fixed in the contract, and the rider attached thereto, to the posted service station price of The Standard Oil Company of Ohio.

2. The Pennzoil Company received from The Standard Oil Company of Ohio and forwarded to him on certain occasions price change bulletins issued by The Standard Oil Company of Ohio to its division managers, which usually arrived in Mr. Ingram's hands on the morning the price change specified in the bulletin became effective.

In regard to the provision of the Pennzoil contract with Mr. Ingram above referred to, to the effect that Mr. Ingram was to receive a certain discount or margin off the posted service station price of The Standard Oil Company of Ohio, The Standard Oil Company of Ohio emphatically states that it had no knowledge of the existence of the above mentioned provision in the Pennzoil-Ingram contract, and had no knowledge of the fact that it was the policy of the Pennzoil Company at that time or at any other time to insert provisions of this type in its contracts with its jobbers. Obviously, the mere existence of such a provision in the contract of a competitor in no way warrants or supports a charge of conspiracy to fix prices with such competitor, especially if there are other legitimate business reasons for the presence of the provision—these reasons being that no supplier of gasoline can obtain jobber customers in territory in which there is a leading marketer of gasoline without in one form or another, either verbally or in writing, guaranteeing that its prices during the period of its contracts will maintain a certain relativity to those of the leading marketer in the territory.

As further evidence in support of his charge of price fixing between The Pennzoil Company and The Standard Oil Company of Ohio, Mr. Ingram testified that he usually received from The Pennzoil Company on the morning that any price change of The Standard Oil Company of Ohio went into effect, a copy of the price change bulletin of The Standard Oil Company to its division managers. While The Standard Oil Company of Ohio was unaware that Mr. Ingram received its price change bulletin from The Pennzoil Company, it wishes to state that it has for some time past been the practice of the company, at the time a price change bulletin is mailed to its division managers, to mail a copy of same to any of its competitors who request it, as well as to the trade journals.

This policy was adopted solely as a matter of self-defense. In order to effect a state-wide price change, The Standard Oil Company of Ohio must mail out to each of its thirteen divisions, not later than the second evening prior to the effective date thereof, its more or less complicated price structure, setting forth the new prices. It then becomes the duty of the division managers to notify over four thousand five hundred dealers and two thousand employees and to acquaint them with the details in connection with such price changes on the day prior to the effective date. It is of course impossible to keep any such information, passing through so many hands, a secret, with the net result that all the company's officers are besieged with requests from competitors and customers for details as to price changes, at a time when they are particularly busy in putting the changes into effect. It was to minimize such requests for information that the company adopted the policy of mailing, upon request, to competitors, customers and others who asked to be placed upon our mailing list, our price change bulletins. It should be noted, however, that such price bulletins are sent out by us only after our price change move is decided upon and set in motion in our own organization. We of course do not know what our competitors do with our price bulletins when they receive them, but we assume that in the case referred to in Mr. Ingram's testimony, The Pennzoil Company received copies of our price bulletins, since they were on our mailing list, and forwarded one to Mr. Ingram in order to

acquaint him as rapidly as possible with the price change contemplated by us. To infer from our practice of sending out price bulletins to competitors and others to information of our price changes after the same have been decided upon and put in motion in our own organization, that we are in any price fixing conspiracy with the receivers of the bulletins is wholly and utterly unwarranted.

The second charge made by Mr. Ingram in his testimony was to the effect that there was in Canton a group of dealers who attempted to maintain posted prices and prevent price cuts by means of intimidation and violence, and that "there is definitely a hook-up between The Standard Oil Company of Ohio and this group."

This charge is unqualifiedly false. A group of dealers in Canton did attempt to maintain posted prices and prevent cut prices throughout Canton by means of picketing, including the blocking of service station driveways. As a matter of fact, in nearby Akron, as a part of this same movement, The Standard Oil Company's own salaried stations were out of business for approximately a week as a result of such tactics, the motive being in this case to force the company to raise its posted price on gasoline. A reading of the testimony of Mr. Ingram before your committee discloses that the only evidence he presents to connect The Standard Oil Company in any way with the Gasoline Dealers' Association responsible for the picketing in Canton is a newspaper clipping to the effect that the President of the Dealers' Association had some negotiation with The Standard Oil Company "in an effort to get a uniform price throughout the county, but that nothing had been accomplished."

As a matter of fact, The Standard Oil Company of Ohio has always vigorously resisted pressure, designed to force it into price fixing agreements. The company's position with respect to such pressure is set forth in "Standard Oil Company Exhibit A", attached hereto and made a part hereof. The exhibit in question is a clipping from *The Cleveland Plain Dealer*, dated May 23, 1937, containing a prepared statement of the company's policy in connection with the joint campaign of labor unions and dealer organizations, designed to bring pressure upon the company to raise its posted prices. At that time, demands had been served upon the company to raise its price of gasoline one-half cent a gallon, and an ultimatum served upon the company that unless the price raise were put into effect, the company service stations would be picketed. The company's policy was broadcast at that time by the press throughout the state, and still represents the attitude of the company.

Exhibit A. The Standard Oil Company (Ohio)

[Cleveland Plain Dealer, Sunday, May 23, 1937]

INDEPENDENTS PUT GAS UP HALF CENT—SOHIO ANNOUNCES REFUSAL TO FOLLOW INCREASE; CITES "RACKET"

A gasoline price war involving the eternal triangle of the petroleum industry in the county—the independent operators, the union and the major oil companies—loomed last night as the company-owned stations refused to follow the price increase fixed by the Master Gasoline Operators Association.

The increase of one-half cent per gallon for all grades was made by the independents yesterday after the major oil companies had refused the operators who sell their products an increase in their margin of profit.

The dispute centered around the Standard Oil Co. of Ohio, which employs no union operators in its company-owned stations and no union drivers on its gasoline trucks. Standard Oil refused to raise the price of gasoline along with the independents and was followed by the other major oil companies.

Of the 1,500 gasoline stations in Cuyahoga County, 1,427 are operated by independents, who are either outright dealers or lessees. Of the 73 company-owned stations in the county, which have refused to advance prices with the independents, 61 are Standard Oil stations. The others are Cities Service, Socony-Vacuum and Sinclair Refining Co.

Phil Hannah, business representative of the Gasoline Station Operators Union, was outspoken in his denunciation of the company-owned stations that refused to follow the price rise.

"Why is it that the company that attempted to raise prices a few weeks ago and was balked by another company should refuse to cooperate now that it is absolutely necessary to increase the price of gasoline?" Hannah asked.

It was understood that the union, which is supporting the efforts of the independents to raise prices to meet the new union wage scale, would picket stations that refused to meet the new price.

From certain sources it was intimated that the independents that raised prices might be in violation of the Valentine Act, state law governing conspiracy to fix prices.

A statement by A. A. Stambaugh, general sales manager of the Standard Oil Co. of Ohio, follows:

"The Standard Oil Co. of Ohio will not follow the raise on gasoline of one-half cent a gallon put in effect this morning by gasoline dealers.

"The issue at this time is not whether present prices are too low but rather whether the price of gasoline to the public in the future shall be fixed by collusion between marketers and a labor union.

"Labor, of course, has the right to enter agreements fixing wages, hours, working conditions, etc., but steps far beyond its province when it undertakes, either through coercion or collusion, to enforce prices it believes are necessary to cover such increased costs.

"The Standard Oil Co. of Ohio opposes the turning of our industry into a racket at the expense of the consumer after the fashion of Seattle.

"Our company has no quarrel with labor. Our wage rates have been and are as high or higher than the corresponding union rates at all times and our employes have bargained collectively through such agencies as they themselves have chosen.

"At a time when gasoline consumption for the first four months of this year has increased in this area in excess of 20 per cent. with a consequent reduction in costs ample to cover all wage increases, and more, it is clear that a higher price is not now in order."

EXHIBIT No. 1354¹

A. A. STAMBAUGH,
Vice President

THE STANDARD OIL COMPANY (An Ohio corporation)

SALES DEPARTMENT

CLEVELAND, O., October 24, 1939.

MR. JAMES R. BRACKETT,

*Executive Secretary, Temporary National Economic Committee,
Washington, D. C.*

DEAR SIR: Pursuant to your telegram of October 23rd advising us that original statement of The Standard Oil Company of Ohio, answering George B. Ingram, recently mailed to your office, should be duly attested, kindly be advised that we are enclosing herewith a carbon copy of the original statement with affidavit attached.

This is in connection with our request that same be made a part of the permanent record of your Committee.

Very truly yours,

A. A. STAMBAUGH.

AAS:G.

AFFIDAVIT

STATE OF OHIO,

County of Cuyahoga, ss:

A. A. STAMBAUGH, being first duly sworn, deposes and says that he is a Vice-President of The Standard Oil Company (Ohio); that on October 19, 1939, he forwarded to Senator Joseph C. O'Mahoney, Chairman, T. N. E. C. Committee, Room 232, Senate Office Building, Washington, D. C., a statement entitled "Statement of A. A. Stambaugh, Vice-President of The Standard Oil Company (an Ohio corporation) in Reply to Testimony of Joseph B. Ingram before the Temporary National Economic Committee," a copy of which statement is attached hereto and made a part hereof.²

Affiant further says that the statements made in said statement are true as he verily believes.

A. A. STAMBAUGH.

SWORN to before me and subscribed in my presence this 24th day of October, 1939.

[SEAL]

DAN J. DALY,
Notary Public.

¹ Printed at this point in connection with "Exhibit No. 1322," immediately preceding.

² Exactly duplicates the statement in "Exhibit No. 1322," supra, p. 9927.

EXHIBIT No. 1323

STATEMENT PREPARED FOR THE TEMPORARY NATIONAL ECONOMIC COMMITTEE
BY WILLIAM S. FARISH, PRESIDENT, STANDARD OIL COMPANY, NEW JERSEY

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During the questioning of Mr. Dow, the Chairman of the Committee suggested the desirability of stating first the unchallenged facts and then moving along to the controversial topics. Such a procedure seems eminently fitting for a paper designed to summarize the great variety of facts and opinions which have been brought before this Committee.

The statements made before this Committee and accepted without challenge may be stated briefly as follows:

- 1: The petroleum industry provides the public with a wide variety of good products.
- 2: The quality of the products and the services involved in their sale have improved markedly over the years.
- 3: The products of the industry are low in price.
- 4: Over the years prices have declined substantially.
- 5: The industry has offered steady employment at good wages. Witnesses have demonstrated that the oil industry pays high wages; that its employees enjoy high annual earnings; that hours of labor have been notably decreased; that there is little seasonal variation in employment; that the turnover of employees is low; that cyclical variations in employment have been small; that the safety record of the industry is excellent; and that its labor relations record is outstanding.
- 6: The industry has offered opportunities for the investment of savings and has attracted capital with a modest return to that capital. The statistics published by the T. N. E. C. show that the capital employed by the "major" oil companies alone rose from 5 to 8 billion dollars between 1924 and 1938 and that the rate of return averaged 5.6% on the book value of the common stock over the same period.
- 7: The industry has been quick to abandon obsolete methods and equipment.

The industry does not claim that these desirable results came about because of altruism on the part of the executives and owners of individual concerns in the industry. Far from it. The industry will readily concede that most of these results came about through the efforts of the individual companies to strengthen their own positions. In essence, the statements mean that there is competition in the petroleum industry, and that competition in the petroleum industry has been in the public interest.

No one in the industry furthermore would undertake to deny that the industry has had the benefit of many favorable circumstances. Of these unquestionably the most important has been the remarkably rapid rise in the demand for petroleum products. Many different factors with which all are familiar have contributed to bringing about that increase in demand. Nor would anyone in the industry deny the contribution to these results made by science, not only by the scientific research activities of the integrated companies, but also by specialized technical organizations, by research scientists in the universities and by men in Government positions. Even after giving all due credit to these considerations,

the industry may properly be proud of its achievements. Undoubtedly mistakes have been made. The industry makes no claim of perfection for its executives, but it does maintain that most executives in the industry today are progressive, are far from satisfied with present products and present methods, and have a strong desire to do a better job.

It should be emphasized that managerial skill has been required to accomplish these desirable results simultaneously. For example, the reduction in the cost of gasoline to the consumer has not been obtained by reducing wages. Wages have been advanced, hours of work have been reduced, and at the same time prices to the consumer have declined.

It is wholly proper that such claims to beneficial public results should be scrutinized carefully by this Committee. The industry believes that the more carefully the Committee examines the evidence presented in these hearings in support of the claims, the more convinced its members will be of their validity. Since the objectives of this inquiry as repeatedly emphasized by the Chairman of the Committee have been to determine whether any obstacles exist to the full employment of men and capital, the unchallenged results just listed are immensely pertinent. Judgment as to whether the petroleum industry is free from such obstacles must rest in the last analysis on an appraisal of the results of competition as it exists in the industry.

II. CONCENTRATION OF ECONOMIC CONTROL

Throughout these hearings much interest has been expressed in the extent to which the control of the industry is concentrated in a few hands. A complementary question is that of the extent to which opportunities are open to small business enterprises in the industry.

It must be conceded at once that there are some very large companies in the petroleum industry and that taken together these large companies do a substantial proportion of the business. At the beginning of these hearings figures were introduced to show the proportion of the business done by a selected list of companies at the several stages of the industry. Although there may be some reservations as to the accuracy of particular figures, the general picture of a substantial proportion of the industry's business being conducted by large concerns is not challenged. These facts have long been well known.

What is important is the interpretation put upon these facts. If the Committee had their minds made up in advance that the mere presence of large concerns in the industry is in itself evil, it is obvious that there was no point in holding these hearings. I am sure we can all agree, therefore, that the fact that there are a number of large companies which do a substantial share of the petroleum business is merely the starting point. The real purpose of this inquiry, then, must have been to examine the way in which competition works in an industry in which large business units and small business units exist side by side, and to appraise the results of that competition in terms of consumer benefits, in terms of the employment of men and capital, in terms of the opportunities open to small firms as well as to large firms.

That there was once a very high degree of concentration in the petroleum industry is well known. In the days of the old Standard Oil Company more than 80% of the business was done by a single concern. Following the dissolution of that company, there has been in all divisions of the industry an increasing number of competitors. Over the years since 1911 the proportion of business done by the companies succeeding the old Standard Oil Company has been very greatly reduced. The industry believes that overwhelming evidence has been presented at this hearing to the effect that competition in all its forms is all-pervasive and intense.

Much confusion has been evident in these hearings in regard to the question of concentration of economic control. One of the sources of the confusion appears to be in differing definitions as to what is meant by concentration of economic control. One type of concentration of economic control is that of ownership—and it is clear that ownership of oil enterprises has increasingly been diffused among large numbers of people.

A second type of concentration of economic control which has been mentioned in these hearings is the tendency for stockholders to leave power in the hands of corporate managers. Much is made of the fact that few stockholders appear at corporate meetings or take an active part in supervising the managements of their companies. These facts are true, but they are equally true of practically all corporate business. Any implication that, because stockholders sign pro-

rather than attend meetings, corporate managers in the oil industry are free to manage without regard to the interests of stockholders is most emphatically not true.

The third type of concentration of economic control to which reference has been made is the extent to which ownership of facilities in particular branches of the industry is in the hands of some particular number of companies. Here almost anything can be shown depending on the number of companies selected. Why should the number be twenty? In the automobile business, which is admitted to be highly competitive, three companies control a higher percentage of business than do twenty companies in the oil industry. Questions as to the bearing of this kind of economic control on competition cannot be answered statistically. It is much more pertinent to examine directly the extent of the competition among the large companies and to look directly at the opportunities for small business men in the industry.

The extent and intensity of the competition among large oil companies has been amply developed by the testimony which you have heard. I shall therefore not undertake to repeat that testimony; but I do wish to examine in some detail the opportunities for small business men in the industry.

A definition of certain terms is necessary before this question can be discussed intelligently. The word "independent" was formerly applied to all companies not associated with the old Standard Oil group. More recently some of these independents such as the Texas Company, Gulf Oil Corporation, Pure Oil Company, and others, have been grouped with the Standard Oil companies under the term "majors". Now apparently everyone outside the list of majors is called "independent". The analysts of the T. N. E. C., for instance, in tables prepared for the hearing, regularly listed eighteen or twenty companies as majors, and it is concluded that they place these firms in one general category and all others in another category labelled "independent". Parenthetically, it is worth observing that this classification places among the independents a number of the companies which were formerly in the old Standard Oil group. These definitions mean, of course, that the independents include firms of many different sizes. In the producing branch of the industry, for instance, such large independent companies as the Amerada Corporation, the Seaboard Oil Corporation, the Superior Oil Company, the Barnsdall Corporation, the Benedum and Trees interests, and Harrison and Abercrombie are at one extreme, and individuals with an interest in a single well are at the other extreme. In transportation, independent enterprises range in size from an individual owning a single truck to large steamship companies owning and operating tankers for charter. In refining, the range is from small skimming plants requiring investments of a few thousand dollars to concerns operating cracking plants which cost several million dollars. In marketing, the size of independent operation varies from the single station unit to the marketer with a substantial position in particular territories, as for instance the Jenney Manufacturing Company in New England or, the Spur Distributing Company operating throughout the south. In the immediately following sections of this paper attention will be directed to the prospects for both small and large scale independent business men in producing, refining, transportation, and marketing.

Opportunities For The Independent In The Producing Branch of The Industry

The exploration for and the production of crude oil has long attracted independent business men. The prospect of becoming a millionaire almost overnight on a relatively small investment has always been an inducement to a large number of persons to risk their capital in production. Mr. DeGolyer testified that while the large company has certain advantages over independents the "independent will be a wildcatter as long as there is any oil industry left to wildcat in". Mr. Crowley testified that the independents had been the chief discoverers of new fields as a result of their wildcatting operations. The record shows that eighteen major oil companies, not including Mid-Continent Petroleum Corporation and Standard Oil Company of California, owned 95,000 wells of some 360,000 in the United States in 1938. Even after allowance is made for the unknown data of these two major companies, it is safe to generalize that most of the oil wells in the United States are owned by independents. It is impossible to tell how many wells are owned by large scale and how many by small scale independents. The record is clear as to the past and present opportunities for the independents, but the vital question is as to the future.

The credit for the discovery of America's oil-fields goes to the small exploratory enterprise rather than the large organization. It is the individual, the small company, the so-called independent, the itinerant wildcatter who has found America's oil. This has been true in the past and it is true today. In my judgment, it will be just as true ten years from now. The truth of this statement, that the discovery of new oil-fields is usually made by the small fellow rather than the integrated company, is borne out not only by the statistics kept by our own company, but by the observations of others outside our organization.

It is worthy of note that the costs of finding oil in America have progressively declined over the last twenty years in spite of the diminishing number of oil-fields yet to be found, and in spite of the constantly increasing depth to which the drill must go to encounter new petroleum reserves. In my judgment, finding costs twenty years ago for the industry at large averaged 50¢ per barrel. Ten years ago they were down to 25¢ per barrel. Today they are on the order of 15¢ per barrel. This is a result of improved techniques of oil finding. These estimates of costs come not only from our own engineers, but they are checked by the observations of other qualified operators, both independents and majors.

While the above statement as to the cost of finding oil is true, it should be noted that the cost of producing oil in the last few years has risen substantially; among others we note increased taxes, increased cost of materials, increased wages, and increased investment per barrel of oil produced.

It is true that exploration for petroleum has become a complicated, specialized art. But it has also become a more dependable procedure, and the services of qualified exploratory enterprises are not monopolized by the large units in the producing industry. On the contrary, they are available in every important oil-producing region to the small operator as well as to the large. And these services which may be commanded by the small operator are furnished by skillful, reliable, successful organizations. Thus possible increases in the cost of exploration (on an absolute rather than a per barrel basis) do not constitute a serious obstacle to the continued finding of oil by small operators. The independents have an opportunity to use the latest developments, whether they be seismograph, torsion balance, gravimeter, magnetometer, soil analysis, or other methods, at a reasonable fee.

Many independents are enabled to drill wildcat wells because of their ability as entrepreneurs to obtain the assistance both of major companies and of others who are interested in the sinking of wells in particular areas. This assistance takes the form both of cash (so-called "dry-hole money") and of contributions of acreage. A great number of wells are drilled each year on the basis of such promotions.

A factor which has been mentioned as likely to restrict opportunities for independent operators is the accumulation of reserves by the major companies. Senator O'Mahoney, for example, asked Mr. DeGolyer: "Would it be proper to say that the independent prospector gets the wells but the big companies get the reserves?" In answer to this question, vigorous prospecting is carried out by individuals and small organizations and by some large oil companies. Many new fields and many new wells are brought in by independents, but it must be understood that these independent prospectors typically are interested in making a quick killing. They wish to sell out to someone else to make a quick profit, to get the present value of future production immediately instead of waiting for 10 to 40 years. As soon as they have turned over a few of their wells and leases on that basis, they seek a new development in order to repeat the process.

The purchasers of the leases held by the prospector are either independent producing companies or majors. Some majors are more successful than others in their own prospecting, and the less successful are quite likely to be active bidders for properties brought in by independent prospectors. Surely if the major oil companies made no effort to protect their large investments in refining by maintaining crude reserves, they would be subject to serious criticism by their stockholders; and if they made no efforts to discover oil, they should be criticized as failing to serve the public interest.

The subsidiaries and affiliates of the Standard Oil Company (New Jersey) do not produce their reserves as fast as some other firms. One important reason for this situation is that these companies are making a genuine effort to use engineering standards in the development of oil fields so far as competitive conditions permit. They are seeking optimum output from all fields. They expect to be in business many years; it is to their advantage to have a supply of oil at as low a cost as possible for a long time to come; hence, they have every reason to produce according to the best engineering standards.

Another reason why the oil production of major companies is not so high in relation to their reserves as independent oil production is in relation to independent reserves, is that in granting exceptions to spacing rules and in setting allowables in fields in which independent producers predominate, state regulatory bodies do not treat major companies as well as they do the independent operators. The small independent operators are numerous. Not all of them are wealthy men. They are more anxious to obtain their money now so that they can spend it while they are living rather than to pass it on to their grandchildren. As a practical political matter, the state regulatory bodies probably recognize that the corporation can wait better than the people who have votes to cast. This is only human. When a major company is discriminated against too flagrantly, it can and does resort to the courts.

In spite of the practice of cashing in on some of his discoveries and selling them to a major company, thus increasing the major companies' proportion of total proved reserves, the small independent has really enlarged slightly his proportion of proved reserves in recent years. By and large, the independent has held about the same proportion of proved reserves for the last twenty years, but for the year 1938 as compared with the year 1937 the independent has increased his share of total proved reserves.

The majority of the proved reserves of petroleum in the United States today is owned by the major companies. That is to say: if the reserves of every company which owns as much as 1 percent of the total proved reserves of the Nation are added together, the total will constitute more than half of the proved reserves. The balance of the reserves, something less than half the total, is owned by thousands of small operators. At first sight this fact might be taken to indicate the elimination of the small operator as a competitor in the producing industry. But this would be a mistaken conclusion, as will appear from the facts recited in the succeeding paragraphs. If the twenty largest operators own some 60% of the total proved reserves it merely means that on the average each operator owns about 3%. The largest of these companies owns only about 10% of the total, while the reserves of the smallest company in the list of twenty majors are of the order of 1 per cent of the total.

As to the finding experience of small enterprises versus the majors, the estimates of our own engineers afford the following figures on current and recent finding results:

At the end of 1938, our engineers estimated the total proved reserves in the United States at 16.7 billion barrels, (an estimate which has since been increased) including California as well as the territory in which our own companies operate. Of this total, the twenty¹ largest producing companies in the business owned 65.26%, whereas all other operators owned the balance, 34.74%. Of the additional oil proved up in the United States by discoveries, extensions and revisions of previous estimates in 1938, amounting to a total of about 1,200,000,000 barrels, the twenty major companies obtained 600,000,000 barrels, or exactly 50%, while all other operators obtained the remaining 50%. Thus, the independents improved their position during 1938, the last year for which figures are available. That is to say, the independents, with less than 35% of the existing reserves, found or owned 50% of the oil that was added to the total supply during that year. The twenty majors, failed to increase their reserves in proportion to their existing ownership.

When the independent producer makes any complaint, his chief grievance is that conservation restricts him from exploiting and producing rapidly all the oil that he has. As indicated above, the small independent producer is likely to take a short-run viewpoint; he does not always like to play the game according to the conservation rules. This feeling, however, does not prevent numerous new producers from entering the oil business. In the State of Texas, for instance operators of oil wells are required to file reports with the State Comptroller, and I offer for the record the following certified analysis of the number of operators doing business in Texas as of January 1 for the years 1930 to 1939:

Year:	Number of Operators	Year:	Number of Operators
1930.....	1152	1935.....	2479
1931.....	1194	1936.....	2667
1932.....	1912	1937.....	2780
1933.....	2242	1938.....	2835
1934.....	2306	1939.....	3312

¹ These twenty companies are not identical with the twenty companies for which figures are reported in the T. N. E. C. tabulations, although a substantial number may appear in both lists.

In summary, the foregoing discussion shows that now as in the past there is a real opportunity for the independent business man to engage in the production of oil and that there are no discernible trends strong enough to justify the conclusion that similar opportunities will not continue in the future.

Opportunities For The Independent In The Refining Branch of The Industry

In the refining branch of the industry there are more than 400 plants, but those controlled by the major companies produce a very high percentage of all the gasoline. As Dr. Wilson demonstrated so clearly, large scale refining units requiring a substantial investment have markedly lower operating costs, obtain higher percentage yields of gasoline from a barrel of crude, and make better quality products than do many small refineries. The plants operated by independent concerns vary from small skimming plants to large efficient units.

The basic question before your Committee is whether it is possible for independents operating on any scale to exist within the refining branch of the industry as it is now organized and subject to the conditions which you have heard discussed. Essentially the complaint of the refiners is this: that periodically the prices of crude are too high or the prices of products are too low, with the consequence that the spread between the two is inadequate to cover expenses of operation and leave any return on the investment.

Let us look first to the situation of the small refiner located in an oil field. The prevailing opinion is that there is little opportunity for small refineries located in oil fields. In the past, small refineries have appeared in oil fields during the period of flush production when there was a large amount of crude temporarily available at low prices. The rapid development of fields, the inability of pipe line companies to build fast enough to take all the crude, the desire of groups of producers to build their own refineries to serve the local market, these have all been factors bringing about the erection of small refineries despite the manifold economic advantages of large scale units. So long as the amount of refining of this sort is not in excess of local demand for products, such refineries may last quite a while. Customarily so many refineries of this type have been erected that the local market could not support them all, and some have eventually succumbed to the intensity of the local competition. As Dr. Wilson testified, the local market around the oil field for the by-products, particularly fuel oil, ordinarily is limited. Fuel oil cannot stand the heavy transportation expense for long distance shipping overland. This fact imposes a handicap on the local field refiner, especially if he does not have up-to-date cracking equipment; but so long as he has a good nearby market for gasoline, requiring no great transportation outlay, he is able to stay in business. It is when this local situation becomes normal, when relatively low priced crude is no longer available that the shoe really begins to pinch. These all are fundamental facts which certainly are not the result of any concerted plan by anybody in the oil industry. It should be noted that these adverse economic facts bear equally heavily on the field refineries of majors and of independents, as the Bureau of Mines' list of shut-down refineries will indicate.

When the oil field passes the flush or quick development stage, when pipelines and purchasing companies have established themselves in the field, it is no longer necessary for oil producers to dispose of their oil at low prices, with the result that the opportunist refiner often finds that he can no longer get crude at low prices. Then he must either pay competitive prices for his crude supply or give up his connections. If his margin will not permit him to pay competitive prices, he has to take the second course.

Under conservation the flush stage in the development of an oil field has been eliminated. To the extent that low price crude incident to the flush stage of production was necessary for the successful operation of such small field refineries, conservation has restricted the opportunity for the small business man. The influence of the flush stage on the erection of small refineries in the field has been illustrated by the recent history of Illinois, where 16 small refineries were built in the last year and one-half and three more are now building. The Illinois fields are typical of interior fields, except that they happen to be located not far from large consuming markets.

On the Gulf coast, refineries have advantages over most interior field refineries because, in addition to having a large variety of near-by sources of crude available by water as well as by pipe line, they reach the world market for fuel oil in the Gulf; and cheap transportation provides access for them to many large consuming areas. It is readily apparent that such refiners avoid the handicap of

transportation disadvantage to which some interior refiners have subjected themselves by building capacity beyond the requirements of their local markets.

Thus it is obvious that the refining branch of the industry at present does not offer broad opportunities to men of limited means. The independent who has a thoroughly modern plant wisely located can be successful in this business. There are developments in sight which may improve his opportunities. Compared with the types of processes now in use which yield the largest percentage of gasoline, the new catalytic cracking processes will permit a reduction in the amount of investment per barrel of daily crude capacity; and, more important, they will yield more valuable products. Whereas under present methods a substantial amount of fuel oil is necessarily produced, under catalytic cracking very little fuel oil will have to be made. These new facts may in the future improve the position of the independent refiner.

Opportunities For The Independent In The Transportation Branch Of The Industry

The small firm has little opportunity in the construction and operation of trunk pipelines, whether for crude or gasoline, or in the operation of tankers. The average small refiner can afford to have a local gathering system if he is in the field, and in the principal oil states many independents, both producers and refiners, have pipe line systems. Large trunk pipelines, however, involve a very large investment, and their successful operation depends upon running them at or near full capacity. Consequently, the little firm ordinarily does not go into the operation of this type of pipe line.

Recent technical developments, however, have opened the door once more to participation in the transportation branch by the small concern. The development of highly efficient large transport trucks provides a low cost transportation method, available to those with only limited capital. Similarly, the improvement of inland waterways has permitted the extension of barge operations, a transportation method requiring relatively small capital as compared with pipe lines and tankers.

Opportunities For The Independent In The Marketing Branch Of The Industry

In his paper Mr. Swensrud stressed the need for a clear-cut understanding of the functions performed in the whole distribution of gasoline. Subsequent testimony amply demonstrated this need for much confusion developed from the failure to distinguish between the two kinds of business concerns that are covered by the term jobbers. I am taking the liberty of repeating the distinction. One kind of jobber, called a wholesaler by Mr. Swensrud, sells under his own brand name. That means that he assumes the entire responsibility for inducing consumers to buy his product. He ordinarily shops for his gasoline—buying where he can to best advantage. He buys sometimes from major companies, sometimes from small refineries. Subsidiaries of the Standard Oil Company (N. J.) sell considerable quantities to such concerns. But, because he sells under his own brand, the Standard Oil Company (N. J.) can do nothing for him in promoting the sale of his product. He chooses that responsibility when he elects to sell under his own brand. Many wholesalers feel no responsibility for continuing to buy from us—accordingly, we feel no responsibility for protecting them.

Over the last few years some concerns of this type apparently have been unable to make a profit, although I know that many others have been able to do so. In general, the reasons for their difficulties are these. The brands sold by the major companies have come to be the standard of value in the minds of most consumers. The quality of the gasoline has been partially responsible for this, but the consumer is much influenced by a whole lot of factors—courtesy and personality on the part of attendants—cleanliness of toilet facilities—attractiveness of stations—free services offered. We know that this is true because we have to know it—for a long time we have been making surveys of what customers think about gasoline and service stations just the way Dr. Gallup surveys what people think about any issue. Most major companies have endeavored to cater to all the consumers' desires; as a result most consumers prefer to buy a well-known brand.

That means that the wholesaler with a little known brand ordinarily can get business only by underselling the well-known brands. Most wholesalers, in spite of Mr. Hadlick's testimony, cannot operate at a lower cost for their wholesale functions than can the major companies. They must therefore, buy cheap gasoline if they are to sell at prices lower than those charged for well-known

brands. They flourish, then, when unbridled flush production of new fields brings heavy supplies into the market. To the extent that conservation measures minimize the flush stage of new fields, conservation restricts the opportunities for the wholesaler.

But this emphatically is not a restriction on the opportunities for independent business men in the marketing of gasoline—it is simply a restriction on the opportunities for operating in a particular way.

Another way of operating as an independent business man in marketing gasoline is as a distributor—that is, a jobber handling a major brand of gasoline and leaving to the supplier most of the task of inducing consumers to buy. Such enterprises are increasing in number rapidly; not only are they not being eliminated but they are, in fact, growing in importance.

But complaints come to the executives of the Standard Oil Co. (N. J.) as they have come to you from a small minority of distributors. The complaint is that the spread or margin for such concerns has narrowed over the years. We admit that fact,—indeed we boast about how it has been accomplished. We have found ways of cutting the cost of the bulk plant operation—ways which Mr. Swensrud told you of. We have secured better trucks—we have relocated bulk plants—we have studied handling methods carefully and we have cut costs. We have no monopoly on brains—other people have done the same sort of thing.

Naturally, we cannot sell to an independent distributor in a territory if we can do the job better ourselves. Without losing out in the fierce competitive race we cannot allow him much more in margin than the cost if we were to do the job. Most distributors know the situation just as well as we do—they get costs down and come within the lower margin. Others just stand still. Frankly, such men usually do not remain our distributors very long—any more than an unsuccessful branch manager holds his job very long. Incompetence gets hurt in a competitive industry.

Retailing

Retail marketing has always been predominantly in the hands of small-scale independent business men and it appears that they will not be displaced in the future. Since the extension of the so-called Iowa plan, the ranks of independent business men have been augmented by the addition of former salaried managers of company-owned stations. Several witnesses before this Committee have testified that these men are not really independent because they are continually threatened by salesmen who suggest that 5-day cancellation clauses in leases of company-owned stations will be invoked if the lessee does not do this or that. No doubt such tactics have been used by some salesmen in some companies, but I state emphatically that one cannot generalize on the basis of incidents which not only are exceptions but which also directly violate the established policies of the managements concerned. Oil companies had numerous business reasons for 5-day clauses originally. Many salaried employees do not have the capacity to become independent business men, and as a matter of self protection the oil companies wanted to be able to find new proprietors for stations if the former managers did not succeed on an independent basis. Today most leases are made for the period of one year or longer and contain no cancellation clause whatever. For instance, leases for one year or longer without cancellation clauses are now used by my company.

There is always danger that discussion of leasing arrangements may conceal the true economic relationship of the gasoline retailer and his supplier. This relationship involves a mutuality of interest of considerable importance. The gasoline retailer handles a limited range of products from which he often obtains his whole livelihood, and his place of business carries the sign and trade marks of the supplying company. The latter wants each outlet to be a good advertisement for the brands of the supplier as a result of good standards of service, equipment and display. The supplier depends upon these highly specialized individual business men to make his wares available to the public. He cannot be wholly indifferent to their welfare, because he wants them to remain in business. The oil industry is not unique in this latter respect. There is no point in some comparisons that have been made between retailers of gasoline and retailers of groceries, drugs, and the like. A much more pertinent comparison may be made between retailers of gasoline and retailers of automobiles. As Mr. Pew said, the Chrysler Corporation would be in an absurd position if it filed complaints that Ford dealers do not carry Chrysler cars or parts. Large investments in inventory and in service equipment prevent small business men from carrying several brands of cars. From the sales and service standpoints, the car dealer

whose organization concentrates on the problems of one brand does a more effective job and makes more profits for the capital invested than if several makes are carried. The car manufacturer, on his part, has an outlet that pushes his make of car. The car maker helps his dealers with training courses for salesmen and service men, and he provides them with local promotional material as well as a national advertising program. The analogy between automobile retailing and gasoline retailing, of course, is not complete, but certainly it is more apt than a comparison with grocery stores which carry products of hundreds of manufacturers, no one of whom has a prime interest in the success of a particular store. Both automobile makers and the oil companies want to keep their customers in business, but neither group can guarantee a profit to every retail outlet. Under whatever form of organization the industry may find itself, and so long as the fundamental economic facts remain as stated, there will inevitably be a close relationship between the owner of the brand and the retailer carrying it.

In view of the general adoption of the Iowa plan, it has been argued that the advantages of integrating wholesaling and retailing never did exist. Such a view fails to recognize that this industry is a dynamic one in which the balance of advantage and disadvantage changes from time to time. For many companies some of the advantages of ownership of retail stations where the lower costs of delivery and handling in the wholesale department and the establishment and maintenance of high standards of service which contributed to reputation, volume, and low costs in retail and wholesale operation. These advantages have continued to exist, but the industry found a few years ago that they were being increasingly offset by certain disadvantages. It was for this reason that the Iowa plan was so generally adopted. When the companies were engaged in retail operations they each posted the retail prices at which they would sell. Since the bulk of the retail business in most markets was handled by independent dealers, the company stations could not engage in active "under-the-canopy" or unpublicized price reductions without becoming involved in constant conflict with the independent retailers of their branded products. The effort to avoid these conflicts handicapped company stations in competing for business. While I cannot speak for the executives of all companies, I know that one reason for leasing stations which was prominent in the discussions in our own organization was increasing doubt as to the soundness of competing with our own best customers—that is, retail dealers upon whom we were necessarily dependent for the sale of the bulk of our branded products.

Over a period of years, moreover, the oil companies found that their wage scales were higher than those of some independent retailers, and this resulted eventually in higher costs. Oil companies also worked their employees fewer hours than did independent competitors. This, too, affected costs. Finally, chain store taxes designed to curb the growth of large enterprises, added another disadvantage to the list; and the exemption of small firms from social security taxes was a further disadvantage. No one of these disadvantages by itself was sufficient to offset the advantage of intergrating retailing and wholesaling, but for my company the combination of these disadvantages was compelling.

Summary

In summary, in the production of crude oil the opportunities for the small enterprise are substantial, and there is no trend which suggests a decrease in those opportunities. In refining the combination of technological facts, which put a premium on large capital investment, and conservation, which minimized unbridled flush production, has reduced the opportunities for the speculative construction of small-scale refineries in the fields. Technical developments, however, notably catalytic cracking, may increase the opportunities for relatively small concerns in the future. In transportation, also, the requirements for large capital for the erection of trunk pipelines and the purchase of tankers have definitely been a barrier to small concerns. More recently, however, other technical developments have opened the way for small enterprises to engage successfully in the transportation branch of the industry.

In marketing as in production, the scales are tipped today in favor of the small business unit. All but a small fraction of the retailing of gasoline is done today by small business men. In the wholesaling of gasoline the independent business man holds a substantial position, and there is no persuasive evidence either that his business has been declining or that it will decline in the future.

Thus it is clear that there are differing degrees of opportunity for small scale enterprise in the several diversions of this industry depending upon the economic

and technical facts. The balance of advantage between large scale and small scale operation tends to shift from time to time as the economic and technical facts change.

III. COMPLAINTS OF UNFAIR COMPETITION

Closely related to the preceding topic is the matter of unfair competition. A number of such complaints have been voiced during these hearings. Indeed no hearing on the petroleum industry has been held in recent years when complaints of unfair tactics have not been leveled at the various organizations in the industry. In addition to the complaints at the public hearings, state and federal bodies are constantly investigating charges of this same character.

Representatives of the industry are quite willing to be questioned on these charges, and the present hearing certainly has proved no exception to this willingness. But there is real danger that concentration on particular complaints will cause a loss of perspective. In a proceeding of this kind, when you have listened to 20 or more witnesses tell stories of individual grievances, and particularly when subsequent opportunity is not afforded to the industry to present others who would tell quite a different story, it becomes difficult to keep attention from being diverted away from the main lines of the inquiry. Therefore it appears desirable that certain general observations should be made.

In the first place, the Committee will undoubtedly ask itself whether instances of unfair competition are really frequent; whether they are flagrant; whether they are widespread. We believe that in fact most of the complaints come from small minorities. For example there are some ten to fifteen thousand jobbers of petroleum products in the United States; yet in these hearings the chief proponent of marketing divorcement admitted that the association which he represented included only 250 jobbers.

Next, inspection of the record of this hearing and other hearings shows that many of the complaints cancel each other out. A producer, for example, may assert that the major oil companies engage in unfair competition through devices designed to lower the price of crude oil. He would like to have the price rise. The independent refiner, however, is in favor of a decrease in crude oil prices. He is likely to charge unfair competition on the part of the major companies if crude oil prices do rise. One of the witnesses before this Committee implied that the major companies were seeking to depress the price of gasoline to the disadvantage of independent refiners; and at exactly the same time to which he referred, independent jobbers were charging that the major oil companies were trying to keep up the price of gasoline. No matter which way a company moves, somebody complains.

Too frequently critics fail to look at the other side of the coin. They fail to consider the disadvantages of the alternative course of action. It is indeed unusual when any business decision can be made on the basis of evidence and reasoning which is completely one sided. Almost any conceivable business policy has some advantages and some disadvantages. It is never possible to weed out all the disadvantages, and retain only the advantages. In brief, any constructive criticism of so-called unfair competitive practices must prove not only that there are disadvantages to the practice in question, but also that there are lesser disadvantages attached to some other policy which is possible under the circumstances.

The preceding observations do not mean that the executives of the Standard Oil Company (N. J.) or of any other major oil company are indifferent to these complaints about unfair competition. Large as the number of complaints to public authorities may be, a still larger number of complaints are made to the executives in the oil industry. The executives investigate these complaints, and it is on such investigations that the observations just made are based. The executives believe, of course, that they decide these controversies justly and soundly, but no doubt mistakes are sometimes made. It is eminently proper, therefore, that public authorities should be charged with the responsibility for investigating these complaints; and I can assure the committee that when proceedings before these public bodies cast doubt on the wisdom of any policy which our company is following, that policy receives careful reconsideration. Incidentally, it may not be inappropriate to remind the Committee that almost all the complaints which have been aired during these hearings have already been investigated by public authorities either here in Washington or in the States.

Whatever may have been true in the past, big business today, not only in the oil industry but generally, is forced to operate in a gold fish bowl. Even if executives do not have a sense of public responsibility to begin with, the spot light

forces them to acquire such a sense. But beyond this general situation, there is a particular reason why the Standard Oil Company (N. J.) in common with other oil companies, is acutely conscious of the need for constant care within its own organization. The executives of all these companies would indeed be lacking in understanding if they did not recognize the extent to which suspicion of collusive action has continued as a heritage from the old Standard Oil trust. This Committee will do no more than give the executives of the oil companies credit for ordinary intelligence if it accepts the statement that a great majority of them lean over backwards in the effort to avoid providing any foundation for that suspicion.

Now just one more word about unfair competition. This Committee is hunting for evidence of monopolistic practices which impair the vigor of competition and thus restrict the opportunities for investment and employment. This objective suggests one important aspect of complaints that ought not to be overlooked, namely, the extent to which complaints are themselves evidence of the existence of vigorous competition. Complaints by some of the competitors are one of the earmarks of a competitive situation.

IV. INTEGRATION

One particular complaint of unfair competition is made so often that it deserves a special place in this summary. This complaint relates to integration. Much evidence has been introduced in this hearing in regard to the competition between integrated and non-integrated companies.

Integration is the uniting into one business of several of the stages through which a material passes before it reached the ultimate consumer. The conditions under which integration is desirable are: (1) large volume of business in a single commodity group; (2) highly specialized production, manufacturing, transportation and distribution techniques; and (3) substantial advantages (at some stages) in large scale operation. These conditions characterize the petroleum industry, and it follows therefore that the relations between any one of the stages of the industry and the others next to it are peculiarly close. The refiner needs to be assured of his market. The marketer needs to be assured of his supply. Both need a steady flow of products for efficient operation. Neither is interested in other than the one major product and its related group of by-products. Neither can transfer his specialized equipment to the handling of some different product. There is a high degree of mutual interdependence imposed by the facts. If such relationships are not provided by common ownership, they must be provided by contractual arrangements. When such close relationships take the integrated rather than the contractual form, there is no need for secrecy or tactical maneuvering between the parties concerned. Integration permits the full exchange of information and experience among specialists in the several divisions of the company.

Integration by and of itself does not, of course, automatically produce earnings. But because of the close dependence of one phase of operation on another in the oil business, the integrated form of organization does help very greatly to insure the continuity of the enterprise and to stabilize such earnings as the skill of management is able to produce. Not only the normal operating schedule, but particularly the capital outlay need to be planned in advance; such planning can be more effectively accomplished by an integrated company than a non-integrated one. Because of the rapid changes in oil technology, it is necessary constantly to spend money on research and to invest capital in replacement in order to keep abreast of competition. Since the inherent risks of the oil business are substantial, conservative investors as distinct from speculators, want to have some assurance of continuity and stability of earnings before they put capital to work. Without integration oil companies would not have been able to spend such large sums on research and improvements. Integration, therefore, bears a very direct relation to both progress and investment.

It is of interest to note in passing that the current attack on integration, not only in the petroleum industry but also generally, is a new fashion in business and economic criticism. A few years ago it was not integration that was attacked, but instead the system which was in disfavor was the one in which a large number of steps intervened between the consumer and producer with a separate business enterprise hoping to make a profit at each step. The days of agitation against the middleman, the days when the intervening of a large number of separate business profits between the raw material producer and the final consumer was thought to be socially wasteful, are within the memory of all of us. In essence, integration simply amounts to an effort to draw the shortest possible line and make the closest

connections between the production of the raw material and the delivery of the finished product to the final consumer; and if these functions can all be combined under one general overhead and one profit, so much the better for the consumer.

It is a curious thing that it should be thought somehow socially undesirable for a company to fail to levy a profit at each stage of a combined operation; and yet that notion seems to underlie much of the criticism of the integrated companies' profit and loss accounting. There seems to be suspicion because an integrated company has difficulty in saying just how much its profits are at each stage of its operation—production, transportation, refining, and marketing. This difficulty arises from two sources. First, there is a definite accounting difficulty, not alone in the allocation of overhead charges to the various activities, but also in the determination of the "cost" figures at which transfers of products are made. At what "cost" shall crude oil from the company's own wells be charged to the refinery? At what refinery billing price shall gasoline be charged to the company's own bulk stations? Small variations in the "cost" figures at which these transfers are made will cause very large differences in the departmental "profits." In the second place, there is a policy difficulty. An integrated company should not think of its total profits as merely the algebraic sum of the net profits and net losses of its operations at each of the several stages in which it is engaged. Instead, the total over-all profit is the major objective. One of the principal advantages of integrated operation is that the management may see as one whole, the problems of production, transportation, refining, and marketing. The aim of the management, therefore, is to operate each stage of the business harmoniously with all the other stages in such a way as to maximize the company's total earnings. Concentration merely on the making of profit at each stage, irrespective of the effects on the other stages, is not a sound management philosophy for an integrated company. If the integrated company is to succeed in doing a better job, not only for stock holders but also for consumers, top side management must take the general view.

There is no denial of the fact that many of the complaints which have been voiced to this Committee arise out of the competition of integrated companies with non-integrated companies. The argument is advanced that even if the greater over-all efficiency of the large integrated company be granted, still it is unfair competition for that company to operate side by side in the same markets with non-integrated companies, because it is in a position to spend more money at a particular stage of operation than its smaller competitor. To take such a view is to argue that competition should be kept static, that experiment, change, and progress in the grouping and combination of business functions should be restricted. If we are to maintain a free economy, it is vital that such experiments and changes should not be restricted. Invention and discovery along these lines are as vital as invention and discovery in a laboratory or a manufacturing plant. If we are going to maintain anything like a steady flow of investment in this country, the way must be open for capital to make experiments.

It is this freedom of capital which needs to be emphasized, rather than any particular pattern of business. It has been testified that well managed non-integrated companies are amply able to maintain themselves in the industry alongside the integrated companies. Nobody wants to force them to become integrated. When the major companies found that the complete form of integration of the marketing function represented by the operation of owned filling stations had more disadvantages than advantages, they withdrew from such operation. Conceivably at some future time economic and technical changes not now foreseeable may cause a further swing away from integration, in which event capital should be left free to move in the direction which it believes to hold the most promise of profits.

Pipe Lines

Much of the integration argument has focused on the question of pipe line earnings. This subject has been discussed by so many witnesses from so many angles that there is grave danger of losing perspective. A summary of the salient points may therefore be useful.

Like many other parts of the oil business, pipe lines have been in a period of transition. For one thing the risk element in their construction has been reduced through the effects of proration in lengthening the useful life of oil fields. On the other hand, competition has increased. For instance, both gasoline and crude pipelines are now beginning to feel the competition of trucks and barges.

Pipe lines inevitably have a dual aspect. Because of the nature of the commodity and the character of the transportation problem pipe lines are essentially a plant facility. At the same time, because the right of eminent domain not

infrequently must be invoked in their construction, they have been made common carriers by law, although they do not possess some of the important attributes of other common carriers. It is this dual aspect of pipe lines which gives rise to many of the disputes; but here, too, a transition has been taking place, a change to common carrier status which is now essentially complete. Under the present well established common carrier status of pipe lines, there is suitable recourse through existing agencies of the law for any shipper or prospective shipper who considers that rates are too high or rules unreasonable.

Pipe lines are subject to regulation either by the Interstate Commerce Commission or by State authorities or by both. No one can demonstrate any lack of service by the crude oil pipe lines to either producers or refiners. In Texas, where the minimum tender is only 500 barrels, all the pipe lines are actively seeking common carrier business. Any producer or refiner can hire any Texas pipe line to transport his oil. I have never known of a case in the last 25 years, where a producer or refiner has been denied the use of pipe line service. This record affirms the public service of the lines.

In regard to pipe line earnings one further point should be made. Earnings are not in fact so high as they were made to appear by the method used by the Department of Justice. It appears from Table 22 in "Exhibit No. 1138" that the Department of Justice calculated a percentage rate of return which used "net investment" as the base. This term "net investment" was defined as "the investment in carrier property after depreciation". This basis unfairly excludes some of the assets of the pipe line companies; the total current assets, for example, are omitted, although they are surely part of the business. How many a pipe line company get along without operating oil stock necessary for operation, warehouse material and supplies and a working cash balance, just to cite some major items?

After all the fairness or unfairness of rates is to be judged by the fair value of the property, and the present rate structure is certainly not allowing an excessive return on that basis in most instances. This is most certainly true for pipe line companies owned by our subsidiaries and affiliates. I have had prepared some estimates on the percentages of earnings based on the new tariffs and on the present runs. The percentage earnings on the I. C. C. valuation are as follows: Humble Pipe Line Company, 11%; Standard Oil Company of Louisiana (Pipe Line Department), 15%. We do not concede that the I. C. C. valuation is a fair valuation, and it does not take in all the necessary items.

The continued reduction in pipe line rates during the last eight years has been brought about by three principal causes. In the first place, proration, by extending the life of oil fields, has also extended the life of the pipe lines to those fields. The capacity of some pipe lines is not taxed. In the second place, a number of new sources of crude oil have been discovered. The most influential discovery was in East Texas, which because of its location within a comparatively short distance of Gulf Coast refineries, enabled the refiners there to secure crude oil supplies at low pipe line cost. The first indication of the importance of this East Texas competition was given in an announcement on April 21, 1931, by the Humble Pipe Line Company, of an average reduction of pipe line rates affecting its entire system. The Committee might be interested in a short quotation from the announcement which I made at that time as President of Humble Oil & Refining Company:

"The discovery of this tremendous field has brought new problems before the industry, affecting not only the production and sale of crude and products, but transportation as well. Obviously numerous adjustments are necessary as a consequence of so important a development. Humble Oil & Refining Company recognizes that the sale of crude from older existing fields cannot continue without adjustment in the delivered cost of such crudes to a basis proportionate to East Texas. In an effort to effect some of these adjustments which are essential to the maintenance of the movement of oil from other districts, and to help producers in other fields to meet the burden of competition of East Texas oil, Humble Pipe Line Company is proceeding to reduce its tariffs affecting practically its entire system in connection with which our total delivery charges on crude oil will be reduced approximately 20%, effective as early as the interstate schedules can be made to apply."

Since that date there has been continuous pressure on pipe line rates in Texas, and several reductions in pipe line rates have taken place. East Texas best illustrates the significance of new sources of oil supply because it was the most

important. It does not, however, stand alone, for other new discoveries have had a similar impact.

The third cause of the reductions in pipe line rates has been the development of other means of transportation of crude petroleum and its products. These have directly or indirectly affected the demand for the services of the pipe lines. Both ocean and river transportation have greatly increased in importance. They may reduce the barrels of oil carried by the pipe line systems. Pressure from regulatory authorities was of relatively little importance, although the investigations and orders of the Interstate Commerce Commission of recent years have doubtless been of some weight in rate reductions.

Successive reductions in rates have brought the present earnings of pipe lines down to a point where the return may well be inadequate in some instances. The risk in pipe lines has by no means disappeared. Oil fields become exhausted and demands shift.

New fields, requiring new pipe lines, will be found in the future as in the past. As is shown in Table 17-a of the materials prepared by the T. N. E. C. analysts, total trunk mileage of crude oil pipe lines increased from 57,800 miles in 1928 to 75,887 in 1937. The pipe line systems of the United States are not yet completely built; new oil fields will require new pipe lines.

The risk in the erection of new pipe lines is much less under the existing set-up than it would be if pipe lines were segregated by law from other branches of the industry. An integrated company can avoid the difficult and prolonged negotiations that a non-integrated pipe line company, constructing new lines, would have to go through to assure itself a supply and a market and to raise the necessary capital. The handicaps which a non-integrated company would suffer in trying to build a new pipe line would result in injury to both producers and consumers, just as the advantages of the present system of pipe line construction and operation are shared, under the present competitive conditions, with both these groups.

Pipe line disintegration has no serious backing anywhere in the oil industry, of that I am sure. Pipe line disintegration would surely disrupt the industry and check the employment of labor and capital. Your committee, on studying the record, should remove the whole topic from the political arena.

V. PROBLEMS OF CRUDE OIL PRICES AND CONSERVATION

There has been much discussion of the related problems of the price of crude oil and the control of crude production. I think that I am in a good position to try to clear up some of these matters for the Committee. I have had a great deal of experience with the problems of crude oil and crude oil prices, first as an independent producer in Texas and later as President of the Humble Oil and Refining Company. In my present capacity as President of the Standard Oil Company (N. J.), I am not so directly concerned with these problems, because crude oil is bought by our subsidiary and affiliated companies, and the job of determining the prices that they will pay for crude oil rests definitely on them. I am, however, familiar in a general way with the policies which they follow.

In the testimony which the Committee has heard, there has been considerable criticism of crude oil prices. The large oil companies are accused both of forcing crude prices up and of forcing crude prices down. Both of these accusations are false. Crude prices move up and down because of competitive conditions, not because of any collusion among oil companies. If there was any conspiracy among the large oil companies either to ruin independent producers by low prices or to ruin independent refiners by high prices, the executives of the Standard Oil Co. (N. J.) certainly would have knowledge of it. I can assure you that no conspiracy exists for either of these objectives or for any others.

The Posted Price System

Some of their suspicion of conspiracy develops from failure to understand the posted price system. The posted price system needs a careful explanation, because it is a system which well suits the peculiar economic and technical needs of the oil industry but is not a system of price protection that is suited to the needs of other industries. The entire industry would oppose any tampering with the system, however much dissatisfaction there may be with the prices themselves.

Crude prices are posted by the purchasing interests in the oil fields. Sometimes the price is posted by only one purchaser, and the others either buy at that price or offer premiums or discounts based on it. In larger fields, the prices are posted by several purchasers.

The posted price system has three functions. It serves to tell the producer the price at which the company will take the oil. It serves as a basis for settling with royalty interests, who are also sellers of oil. The royalty interest in a single well may be divided between many individuals. The posted price system also serves to tell purchasers of oil from an oil merchant (who has bought crude from a producer) the terms on which the merchant will sell. A large oil company has to make thousands of settlements, and some common basis for them all is needed for both equity and economy. The same basis, the posted price, is used for settlements with both large and small sellers and purchasers.

The posted price system of quoting prices has no necessary connection with either monopoly or competition. If either the buying or the selling of the crude oil produced in the fields were concentrated in a single hand, the monopolist might post a price. He might also make contracts for long term deliveries. A monopolist might post the same price for all or he might discriminate among his sellers or customers. The system of quoting posted prices in the oil fields may have some slight effect on crude prices, because almost everything that happens in the industry and even outside the industry may have some effect on crude prices. But if the posted system is not necessarily connected with either monopoly or competition, the peculiarities of this method can best be understood by studying the system as it exists,—under competition. Under the posted price system the purchaser ordinarily stands ready to take all the production which a producer may legally obtain. Usually a large purchaser does not find such rapid changes in his requirements that he has to make short-term increases or decreases in his takings. He sometimes has to do so, and always reserves his right to do so.

The emphasis placed upon the fact that in some fields there is only one or only a few purchasers is entirely unwarranted. The fact is, of course, true, but it has little or no economic significance. All of the oil wells of the United States are really a part of a common market, and the United States market is only part of a world market. In the whole market there are many buyers and many sellers. In the testimony before the T. N. E. C. there is abundant evidence that there are many economic interconnections between the various petroleum markets. In effect, then, the posted price system brings the world market to the door of the smallest well.

Of course, the various parts of the world market are not always in precise alignment. The very effects of the slight inequalities between markets are part of the process by which those inequalities are constantly tending to disappear.

The policy of the purchasing subsidiaries and affiliates of the Standard Oil Company (N. J.) is to treat all fields and all customers on an equitable basis. This means that in all oil fields in which they buy, prices are posted that reflect, so far as competitive conditions will permit, the relative value of the crude at the refinery taking into account transportation from field to refinery. That policy seems to be the only appropriate one for a company of large size.

Another possible system of quoting prices would be that of long-term contracts with a stated price. As there would have to be many such contracts, they would overlap one another. With overlapping contracts some of the various producers might find themselves receiving less for crude than their neighbors. This would cause great dissatisfaction. It is, of course, true, that the producers would, under a fixed price contract, be protected against a price decline as well as deprived of the chance of a price advance. Others may think that the producers should not undertake the risk and should seek the security of a fixed price contract; but the independent oil producer wants to decide such matters for himself. Under a fixed price contract, the oil producer would be able to change connections less often and would be unable to get the premiums which may appear in a strong market. Under contracts, the independent producer would know less about his market.

The public posting of prices destroys the secrecy of a contract system, brings about a considerable amount of uniformity in the prices posted by all producers for similar crudes (when consideration is given to transportation and other costs of reaching the common market) and gives the same price to both large and small.

Another suggestion advanced is that crude oil be exchanged on an organized market like that for cotton or wheat. These organized commodity markets are primarily adapted to seasonal crops. Such markets, furthermore, show marked instability of price, and there is genuine doubt as to whether the wide price gyrations which frequently occur on them are wholly advantageous from a social standpoint. The disadvantages of such an organized market for crude petroleum seem large; certainly no one in the industry desires to have such a market. No one showed any interest in gasoline contracts when an attempt was made to establish trading in them on the New York Commodity Exchange.

Price Leadership

Suspicion about conspiracies to control prices also arises from misunderstanding the significance of so-called price leadership. The power of the so-called price leader is greatly overestimated. This exaggerated picture develops because the general public, and even men in the industry, get in the habit of looking only at the changes in the posted published prices. These are the conspicuous changes, but they merely follow unpublicized changes in the prices actually paid, or other developments which clearly foreshadow a market trend.

When the crude market tends to be weak, unpublicized discounts from the posted price appear; that is, some sellers offer oil to some buyers at prices below the posted figure. If these discounts are small and scattered, little attention is paid to them. But when they spread so that a substantial quantity of crude is moving below the prevailing market price, some one company, usually but not always the largest buyer in the territory, finally accepts the responsibility of recognizing formally the change that has taken place. Essentially, then, this so-called price leader merely takes the lead in announcing a change in market price that has, to all intents and purposes, already occurred.

In the opposite situation, when the market is tending to be strong, there have been times when premiums over the posted price were paid. Premiums today are infrequent, but there are many other indications when the market is strengthening, such as sales running far beyond estimates, high market prices for finished products, short inventory positions, activity of crude buyers in closing contracts and making connections, disappearance of any substantial volume of crude moving under the posted market, and, particularly, a strong attitude of the regulatory authorities toward maintaining firm allowables and not granting special favors to producers. Perhaps the most important evidence of all is an advancing cost of getting the oil from underground. When an individual company, usually one that is a large buyer of crude, interprets these various signs as indicating that basic conditions are tending to require a higher price, it takes the step of formally recognizing the changed market situation by means of an advance in the posted price.

Thus the so-called price leader is merely the interpreter of market conditions. He is by no means a necessarily infallible interpreter, and if he guesses wrong, he finds himself out on a limb. The price leader is not always the biggest buyer, and it is not always the same company which takes the initial action in each instance. In general, changes in the posted prices of crude lag behind changes in gasoline prices. There is no formula for determining the one right ratio of crude prices to gasoline prices and no formula for determining the one right lag of posted crude prices behind product prices. The existence of the lag is inevitable because the price leader is really the price follower. He announces the changes which have taken place. Somebody always criticizes any price change; that is only natural, and that is why the situation of the so-called price leader is not a happy one. But there is much more criticism of price decreases than of price increases. As Mr. DeGolyer remarked, it is practically an article of faith with oil producers that crude is worth more than they get for it. The company which takes the lead in posting a price cut is distinctly unpopular. After all, the sellers are in close contact with the buying company; they are the people that the company has to live with from day to day. Hence the posted price of crude shows less responsiveness to market changes which point towards a lower price than it does to market changes which point towards a higher price. In other words, the downward price changes tend to be delayed; and it is an elementary fact that after the market situation has become clear any delay in a price change increases the size of the eventual adjustment.

And now I come to what I personally consider the greatest problem of the oil industry, namely, the problem of proration. This is an issue which, as compared with some of the problems that have commanded a great deal of attention at these hearings, is a much more central and significant one, not only for the industry, but also for the whole country. From the standpoint of national economic policy, which is the prime concern of your Committee, it is the petroleum problem. In fact, a great many questions which have occupied your attention during the course of these hearings have their origin in the difficulties that are being encountered in developing sound conservation standards.

The Background of Conservation

The idea of conservation to prevent the wasteful use of such natural resources as gas and oil began to be mentioned in public discussion and some court proceedings at a fairly early date. The State of Oklahoma put a conservation law on its statute books about 1914, and Texas followed somewhat later. For a substantial period, however, these developments had no influence on the course of events in the oil industry. Up to 1924 the industry went its own way. It was able to produce as much oil as needed; when there was over-production the excess supply went into storage. There was more or less alternation between periods of peak production and periods of shortage. The rule of capture held full sway. The oil business had no real comprehension at that time of the nature of its production problems as we understand them today. No scientific knowledge existed then of the relation of oil and gas to each other under pressure in the ground.

What was eventually to prove a revolutionary change in the outlook of this industry dates from 1924.² In that year President Coolidge appointed a Federal Oil Conservation Board, consisting of four members of his Cabinet, and wrote the well-known letter in which he termed the then-existing methods of oil production wasteful, because they were not building up reserves in the ground that would be available in time of need. This action by President Coolidge forced the oil industry to take stock of itself. Members of the industry did not think that they were producing wastefully, according to the then-existing standards. The thesis of the President's letter was challenged; the American Petroleum Institute made a study and reported (report of the Committee of Eleven) that the country had 5½ billion barrels of oil in proved reserves, and that no shortage was imminent.

At the same time, however, this episode stimulated individual companies to begin more careful analysis of their production problems, especially with reference to waste. Soon the industry began to learn how ignorant it previously had been. It began to find out things about the behaviour of oil and gas in combination under pressure in the ground; it discovered that flush methods of production were leaving behind as much as 75% of the oil in a field, that under properly controlled production nearly all this oil was obtainable.

The discussion which begins on page 385, is reproduced in Appendix A.

As this knowledge accumulated and spread, the petroleum industry began changing its whole point of view. This change was in no sense immediate; the philosophy of exploitation was deep-seated, the desire for quick profits powerful. There was opposition on the part of men who thought that any attempts at production control were an interference with their personal liberties. But the movement grew; more States passed conservation laws; the provisions of existing statutes were strengthened; court decisions confirmed the authority of regulatory bodies and cleared up debated issues; both the regulatory bodies and the industry gained in knowledge.

Gradually the general attitude changed, until at the present time no responsible person in the industry, or among the State proration authorities, visualizes a return to unrestricted production. The development of conservation has been an evolution, an evolution that is by no means fully complete, for the industry as a whole is still far from producing on a fully scientific waste-prevention basis. Many of the reasons why progress towards this ultimate goal encounters many obstacles and is inevitably slow will appear from the following discussion of proration problems.

Optimum Production

Conservation is not to be confused with hoarding. Oil conservation is simply a scientific development for the prevention of waste. The engineering basis for the prevention of waste is well established and has been thoroughly tested in practice, as testified by Dr. Pogue, Mr. DeGolyer, and Colonel Thompson. The object is to get more oil out of the ground, to enable the producer to obtain more oil from a particular property in the long run than if he produced it in a wasteful manner. This means production at a rate that will yield the optimum quantity. Optimum production may be defined roughly as "the most oil at a reasonable cost," that is, the most oil that can be obtained without spending more on the

² To give the reader of this record a better picture of petroleum conservation, it ought to contain some excerpts from a report of the National Resources Committee published in January, 1939. This is a report to that Committee from its Energy Resources Committee. The report which is entitled "Energy Resources and National Policy", was submitted to the Congress of the United States by the President on February 15, 1939. Part 4, Section I, of the staff's studies was prepared by Mr. John W. Frey, Associate Director, Petroleum Conservation Division, Office of the Secretary of Interior.

addition to the supply than that addition is worth. The concept therefore embraces economic aspects as well as considerations of physical waste. The idea of optimum production involves several things: (1) The most economical recovery for a pool as a whole should be established at a rate that will maintain the bottom hole pressures. (2) There should be proper well spacing to avoid unnecessary drilling costs. (3) Withdrawals of oil should be made ratably from each property owner's holdings, protecting correlative property rights and maintaining equilibrium within the reservoir. Under a condition of optimum production as thus defined, it will be possible to avoid almost entirely the injurious consequences of the rule of capture. This is the job of proration.

Naturally, the foregoing definition of optimum production is a statement of an objective. For a closer approach to a realization of this objective by means of the proration process, several things are required: (1) more extensive application of the best engineering practice; thus bringing about acceptance of standards of efficiency in production; (2) further development and acceptance on the part of the regulatory bodies and the industry as well of standards of equity not only within a field, but also between fields; and (3) a great deal of patience with slow evolution in a situation where varied and complex social interests are involved. It must be remembered that for roughly fifty years the history of the oil industry was one of unbridled competition in the exploitation of a natural resource. The story was repeated over and over again as each field came in. The large rewards to some of the exploiters of oil fields, the speculation for high stakes, the injurious effects of competition operating under the rule of capture—all this is a heritage which has conditioned the thinking of oil men for many years; whereas conservation, which is in sharp contrast to all this previous history of the oil industry, is only about ten years old. It is also true that acceptance of the new point of view has by no means been simultaneous. Some companies and individuals have pioneered; others have lagged. It is for these reasons that patience is needed.

The Future Supply of Oil

Whenever the topics of conservation and proration are discussed, the question is raised as to the probable extent of the Nation's future supply of oil. Our proved petroleum reserves are estimated at something between 17 and 22 billion barrels, about 14 to 17 years supply at the present annual rate of production. This concept of proved reserves is a technical one. It means reserves which have been tested by sufficient drilling to make possible a reliable quantitative estimate of the recoverable oil which they hold. The figure of approximately 17 to 22 billion barrels represents a substantial increase over the estimates of earlier years, an increase attributable partly to technological developments such as deep drilling, partly to improvement in methods of finding oil, and partly to increased acceptance of the greater total output and more efficient recovery from oil fields brought about by delayed production, i. e. proration. The present figure can be regarded as a more reliable one than the estimates of earlier years. Proved reserves, however, do not include all the oil that exists; many new discoveries of oil doubtless will be made through the drilling of unproved acreage and the discovery of new pools. No one can tell exactly what the future discoveries will be, but while there is ample justification for prudence there is no occasion for alarm. Many advances in the art of finding oil have taken place in the last 15 years, and as these advances have been made they have been put into use. Of course each new pool discovered reduces by that much the potential discoveries of the future. How rapidly new discoveries are made in relation to the rate at which existing reserves are exhausted will determine how large the Nation's reserves will be in the future. Although there are apparently no notable new developments in oil discovery procedures now on the horizon, it is not to be doubted that there will be continued technological advances along these lines and that these advances will play a part in future oil discoveries, how large a part no one can now say.

On the basis of optimum production, how much oil could be currently brought to the top of the ground? It is a personal judgment among most of us in the Standard Oil Company (N. J.) that if withdrawals of crude oil from underground reserves were to take place under conditions which would reduce waste to the practicable minimum, the rate of production might fall short of meeting the current market demand by possibly 200,000 to 300,000 barrels daily. This judgment is based on the best information available, both on the size of reserves and on the most economical methods of production. It is also based on the Company's experience in seeking to apply an optimum rate of production, wherever possible, to its own holdings. The executives of the Standard Oil Company (N. J.) have

some confidence in this estimate; we know that it is an opinion, but we think that the weight of engineering experience supports this opinion.

Relation of Optimum Production to Price

Suppose the assumption is made that the optimum rate will be less than the current rate; what is going to be the effect on the consumer's pocketbook? It is fairly clear that changes on the supply side rather than changes on the demand side have been the most conspicuous causes of major fluctuations in the prices of crude oil—at least during most of the 1920's and 1930's. The variations in the demand for petroleum products which accompany changes in business conditions from prosperity to depression, and vice versa, are not, in the aggregate, so large as they are for many other industries; and their effect on the prices of petroleum products is in general less severe than is the case for many other industries. Therefore, it seems reasonable that when the fluctuations in crude oil production are restricted by the widespread application of the optimum output principle, the changes in demand arising from the ups and downs of business conditions will not be likely to cause extraordinary price variations. That is, over a long period, control of output on the optimum production basis will reduce the range of fluctuations in crude oil prices in comparison with the period before proration.

It is not to be thought, however, that the price of crude under conditions of optimum production is likely to follow any steady or easily predictable course. On the assumption that optimum production initially would be below current demand, an approach through the proration procedures to such an optimum rate of output presumably might—if it happened rapidly—occasion a price advance. Then the normal sequence of events would be stimulation to oil finding activities, increase in the optimum production, and some decline in price. If these developments took place slowly—which is much more probable—they would go hand in hand with relatively little effect on price. Of course, the chance element in the discovery of oil, the effect of changing business conditions at different times and the uneven progress of various States and various oil fields towards the ideal of optimum production, all might combine at times to make price movements irregular and erratic.

One factor of some importance which would affect the eventual price to consumers under the ideal sort of proration would be the lower cost of getting oil out of the ground by proper well spacing and rational field development. With optimum production, the drilling investment for each barrel of oil would be substantially lower. This reduction in cost would help to stimulate oil finding activities and help to establish a balance between optimum output and market demand.

There should also be mentioned the probability that a restricted output of crude oil would place a further premium on advances in the technology of refining and would thus insure continued improvement in the quality of products, at the same time stimulating additional investment for modernization purposes. Even if there was a tendency for prices to consumers to advance somewhat, a reasonably steady price based on optimum production might prove cheaper for consumers in the long run than a situation in which low prices during a period of wasteful production were followed by extremely high prices when the scarcity began to pinch. As a matter of fact, it is quite probable that proration has already made the price of gasoline lower than it otherwise would have been, through increasing the yield of crude from the existing oil fields.

A Correct Price Objective For Crude Oil

All these considerations culminate in the question, "What is a correct price for crude oil?" That is to say, "What are the objectives which a price for crude oil ought to seek in order to be considered correct?" In undertaking to answer this question, I start from four facts:

1. The industry is now, and for some time past has been producing a supply of petroleum fully adequate to meet the current demand.
2. At the same time, the current rate of production is probably above the optimum rate, although proration procedures are improving.
3. Demand may be expected to grow, though presumably not at so rapid a rate as during the past 14 years.
4. The price of crude petroleum has in general been high enough over the last 14 years to stimulate the exploration necessary to increase the proved reserves from about 5,500,000,000 barrels to something between 17,000,000,000 and 22,000,000,000 barrels.

Reasoning from these facts, I personally reach the conclusion that the correct price is the price which will keep the following factors at work and in balance from a public point of view: *production, market demand, prevention of waste, rate of discovery, size of proved reserves*. In other words, it is a price sufficiently high to bring out a supply adequate to satisfy the growing demand, and at the same time to stimulate the discovery of new fields to a point where the optimum rate of production will balance market demand. That means a price high enough to keep up the process of adding to the proved reserves until they reach a point sufficiently great so that the future may be considered to be adequately safeguarded.

This is exactly what the crude oil price during the last few years seems to be accomplishing. The rate of increase in reserves since 1924 has been adequate, in spite of the large requirements; on the other hand, it has not been so rapid as to disturb the balance of the industry. That means that on the average the price of crude oil over this period must have been not far from correct. If conceivably the cost of discovering and producing oil should increase during the coming years, a higher price for crude might become necessary. On the other hand, if proved reserves should increase steadily in the near future to some such figure as 30 or 35 million barrels, a somewhat lower price should then serve to maintain the equilibrium.

Of course you understand that the foregoing is my conception of what the general objective of the crude oil price level should be. It is in no sense a formula for determining a specific price.

*Proration and Market Demand*³

What has been said thus far has been based on the assumption that the proration procedure, from an ideal standpoint, should be directed primarily at achieving the optimum rate of output from each field. In practice, it is obvious that considerations of market demand also weigh heavily with those who direct the proration procedure. The Bureau of Mines provides estimates of demand by States. The initial consumers of crude oil in filing nominations for allowables transmit to the authorities their estimates of the quantities that their markets will absorb. In both these processes, it may well be argued, there is the implicit assumption that the size of the market demand is that which exists at current prices.

The fact of the matter is that it is not at the present time practicable to separate rigidly the concepts of optimum production and market demand. If petroleum is produced in quantities greater than those demanded, with the result that above-ground storage must be provided, waste occurs, not merely deterioration of products in storage, but the waste of capital involved in providing storage capacity beyond current operating requirements. Over-production of crude oil in relation to demand consequently has been held by the courts to be a waste which proration officials have the responsibility for preventing. Hence, consideration of market demand must continue to receive attention.

There has been criticism of the attention which the proration authorities give to market demand. Some of this criticism in particular instances may be justified. Instead of applying the market demand concept to a whole State, the authorities may try to apply it to individual fields. This causes difficulty because it complicates the problems of equity. Problems of equity arise (1) among different producers in the same field and (2) among different fields in the same regulatory jurisdiction. The basic problems of equity are independent of market demand. In a single field, for instance, if there are many surface owners, with differently situated holdings, it is by no means simple to take oil out of the ground in such a way as to treat them all with justice, that is, to preserve an equitable relationship between underground reserves and surface holdings. Such problems are made inevitable by the nature of the commodity, the conditions of its production, and of course by the rule of capture. Bringing consideration of market demand for an individual field into the proration procedure complicates the problems of doing equity, especially between fields. In such a situation it is obvious that pressure will be exerted on the proration authorities,

³ The record already contains considerable discussion of the Bureau of Mines forecasts of demand for motor fuel and crude oil. The record should contain the authoritative discussion prepared by Mr. Alfred G. White, Chief Economist, Petroleum Economics Division, Bureau of Mines, Department of Interior. His statement may be found in the report, *Energy Resources and National Economic Policy*, of which it is Part 4, Section III, Chapter II, (P. 401).

This material appears as Appendix B to this statement.

that special favors will be requested (and sometimes granted), and that complaints of injustice will be common.

Meeting The Problems

There are no easy answers to these problems. In any situation involving so many different people and interests, the attainment of complete equity is an impossible ideal under any set of industry or governmental policies. Critics of the regulatory bodies must remember that appreciation of the need for conservation has been a slow growth in the minds both of men in the industry and of the general public, and that general acceptance of this conservation principle has by no means been either simultaneous or universal.

But there are some directions in which substantial improvement might be made. For one thing, more attention must be given to the proper spacing of wells to get optimum production in each field with minimum drilling expenditure. At the same time, it is also important to insist on higher standards of administrative procedure on the part of the regulatory commissions in order to stamp out the pernicious practice of granting special favors and exceptions.

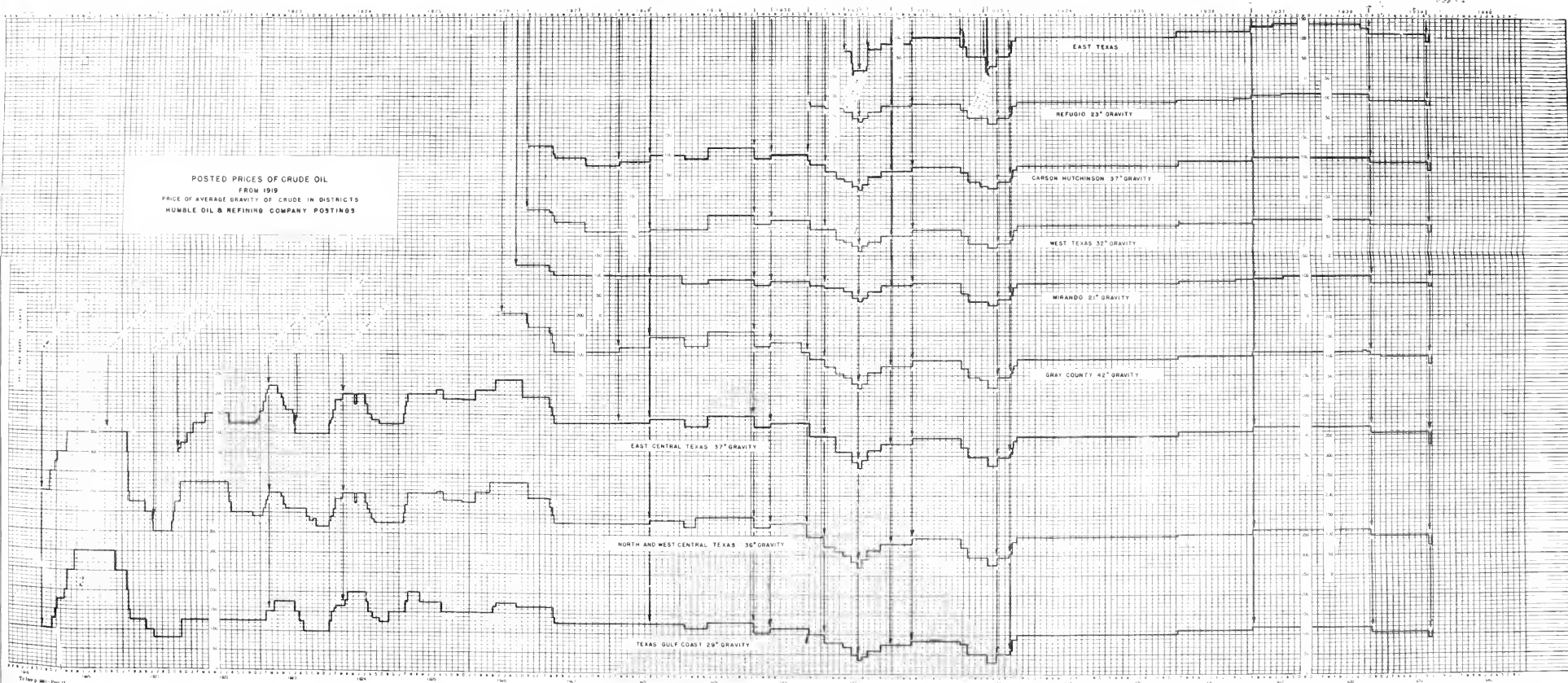
In general, State conservation and proration is a sound concept. Improvement in administration is possible. Elevation of purpose, clarification of objectives, and strengthening of personnel, standards and procedure are all vitally necessary. Although there are valid grounds for criticizing many of the actions of the State commissions, I want to emphasize the fact that notable progress towards conservation has been made under this system. I am confident that this progress will continue.

There is another aspect of the problem which ought to be looked at, and that is the matter of price. There is some reason to believe that in situations such as that which developed in 1938 and the first half of 1939, oil companies have perhaps refrained too much from the use of price as a means of adjusting supply and demand. Comment has already been offered on the way in which crude prices are made. I am here expressing simply my own personal opinion to the effect that there ought to be more responsiveness in the posted price of crude to such changes in basic conditions as became evident in this recent period. It is recognized that the disastrously low crude prices, resulting from the flood of over-production which happened to coincide with the bottom years of the depression, naturally resulted in an over-emphasis on price stability when corrective mechanisms were first established. But it now seems wise to move in the direction of exercising partial control over supply through a more realistic price policy. The proration approach to the problem aiming at the concept of optimum output is vital; but at the same time I believe it will be useful to the industry to make some approach to the problem from the other end, namely, by the method of price.

The practical situation is that the petroleum industry is in a period of transition and that, despite serious doubts as to the value of some of the things done in the name of proration, it does no good to look for short roads to perfection. The better approach to the problem of the oil industry is to seek improvement of the existing proration procedure and mechanisms and the existing standards of performance and equity, and for all parties concerned to seek a better understanding of the whole problem along broad lines of industrial statesmanship in contrast with narrow lines of temporary, sectional, or merely selfish interest. Progress in this better approach will have to be made by seeking out and taking the next logical steps, rather than by trying to reform the whole procedure from some new angle. Such "next logical steps" might reasonably include the following:

- (1) More attention to the development and enforcement of suitable drilling patterns for each field.
- (2) More attention to the determination of allowables based on the optimum rate of production for the field, with necessary consideration to the oil in place rather than to the individual wells.
- (3) More attention to the determination of supply for a State on the basis of the optimum production of that State as established by the aggregate optimum production of the individual fields.
- (4) Continued efforts on the part of the Oil Compact States to get other oil producing States into the Compact group, and to improve their own conservation laws.
- (5) Further development on the part of the Compact States of common standards of production efficiency that will bring a closer approach to optimum production.

POSTED PRICES OF CRUDE OIL
FROM 1919
PRICE OF AVERAGE GRAVITY OF CRUDE IN DISTRICTS
HUMBLE OIL & REFINING COMPANY POSTINGS



- (6) Development at the same time on the part of these States of better standards to assure equity as between owners of property in the same oil field and as between different oil fields.

If both the oil industry and the proration authorities will move in the general direction which these suggestions indicate, and if at the same time the oil companies will adjust their posted crude prices more rapidly to such changes in basic conditions as we have seen periodically in recent years, substantial progress will be made toward smoothing out the present difficulties which stand in the way of effective proration and toward preventing the recurrence of periods when large volumes of crude are being sold at prices below the posted prices for similar gravity being paid for the greater part of the daily crude production.

Just one word in closing, I do not want to claim for one second that proration is against the interest of the large oil companies. It is *in* their interest; but it is also in the interest of the citizens of the producing areas, in the interest of the State and local governments in those areas, and in the interest of the consuming public. It is also most emphatically in the interest of national defense. Furthermore, as regards my own company, the Standard Oil Company (New Jersey) is a big company in the oil industry, and I have not the slightest hesitation in saying that we are in business to make a profit. But we are in business not merely today and tomorrow, but for a long time to come, and we want to make profits not merely today and tomorrow, but also for a long time to come. Therefore, we can and do look at our problems with a long-run perspective; and in the long run we know that for a company as big as ours its welfare that is, the welfare of its stockholders and its employees, is unavoidably bound up with the welfare of the country as a whole. When the big oil companies accepted the idea of proration they voluntarily submitted to restraints which they frequently did not like, restraints which made them forego many opportunities for immediate profits, restraints which were directly contrary to their ingrained habits of thought. But they did it because they figured that in the long run these restraints were going to be good for them. They sacrificed immediate profits in order to gain greater assurance of stability for the future. In the light of all the circumstances, I think it is not an over-statement to say that the present proration program sponsored by the oil industry, imperfect though it may be in many respects, represents an important act of real industrial statesmanship.

"EXHIBIT No. 1324" faces this page.

EXHIBIT No. 1325

LETTER OF THE PRESIDENT OF THE UNITED STATES, DECEMBER 19, 1924

"WASHINGTON, D. C.

"Gentlemen: It is evident that the present methods of capturing our oil deposits is wasteful to an alarming degree in that it becomes impossible to conserve oil in the ground under our present leasing and royalty practices if a neighboring owner or lessee desires to gain possession of his deposits.

"Developing aircrafts indicate that our national defense must be supplemented, if not dominated, by aviation. It is even probable that the supremacy of nations may be determined by the possession of available petroleum and its products.

"I am advised that our current oil supply is kept up only by drilling many thousands of new wells each year, and that the failure to bring in producing wells for a period of two years, would slow down the wheels of industry and bring about serious industrial depression. The problem of a future shortage in fuel and lubricating oil, not to mention gasoline, must be avoided, or our manufacturing productivity will be curtailed to an extent not easily calculated.

"We are not today, however, facing an under supply of oil. The production of our 300,000 wells is in excess of our immediate requirements. That overproduction in itself encourages cheapness, which in turn leads to wastefulness and disregard of essential values. Oil, of which our resources are limited, is largely taking the place of coal, the supply of which seems to be unlimited, but coal cannot take the place of oil in most of its higher uses, on land or sea or in the air.

"For the purpose of giving this responsibility of government in all of its aspects the consideration it demands, I have constituted a Federal Oil Conservation Board, consisting of the Secretaries of War, Navy, Interior, and Commerce, to study the government's responsibilities and to enlist the full co-operation of representatives of the oil industry in the investigation. The government itself is at present one of the largest of the lessors of oil lands, and the public domain still includes large undeveloped reserves of oil, so that the administration of oil resources is a practical question with the Department of the Interior.

"I would express the desire that these conferences may be open and exhaustive. The oil industry itself might be permitted to determine its own future. That future might be left to the simple working of the law of supply and demand but for the patent fact that the oil industry's welfare is so intimately linked with the industrial prosperity and safety of the whole people, that government and business can well join forces to work out this problem of practical conservation.

"Last March I appointed a commission to advise me on the special subject of the best policy to insure the future supply of fuel oil for the Navy. That commission will continue to function in its limited field and might to advantage sit with the conservation board in the conferences I expect will be held between these four secretaries directly concerned, and the outstanding producers of petroleum. Similarly, the members of the conservation board will call upon their technical advisers in the bureaus to contribute to the full discussion of ways and means of safeguarding the national security through conservation of our oil.

(Signed) CALVIN COOLIDGE."

To the Sec'y of War
 Sec'y of the Navy
 Sec'y of the Interior
 Sec'y of Commerce.

EXHIBIT No. 1326

[Annual summary of statistics published by the Interstate Commerce Commission]

AJAX PIPELINE COMPANY

Rate of return based on income from carrier property in relation to gross investment in carrier property (without deduction for depreciation), plus current assets

Year:	Rate	Year:	Rate
1931.....	33%	1936.....	24%
1932.....	31.5%	1937.....	21.5%
1933.....	32%	1938.....	9%
1934.....	29%	Average for the period,	
1935.....	24.5%	1931-1938.....	
		25%	

NOTE.—The company commenced business in March, 1930. Rate for 1930 not computed, since the results were not for an entire year.

EXHIBIT No. 1327

[Annual summaries of statistics published by the Interstate Commerce Commission]

HUMBLE PIPELINE COMPANY

Summary of pipe line investment and earning statistics, 1923-1938

[Based on I. C. C. Published Reports]

[000's omitted]

	Gross investment in carrier property (without deduction for depreciation)	Current assets	Gross investment in carrier property (without deduction for depreciation), plus current assets	Income from carrier property	Capital stock	Dividends declared
1923	18, 228	1, 947	20, 175	5, 020	12, 000	5, 600
1924	23, 605	3, 965	27, 570	6, 784	12, 000	8, 000
1925	33, 341	3, 858	37, 199	9, 066	24, 000	8, 000
1926	39, 620	5, 701	45, 321	8, 541	24, 000	4, 000
1927	66, 602	8, 452	75, 054	13, 535	44, 000	8, 000
1928	74, 964	921	75, 885	21, 721	50, 000	20, 000
1929	80, 767	824	81, 591	25, 539	50, 000	25, 000
1930	82, 759	8, 957	91, 716	17, 735	50, 000	20, 000
1931	86, 577	11, 426	98, 003	16, 459	50, 000	12, 500
1932	86, 793	5, 767	92, 560	14, 808	50, 000	23, 500
1933	85, 815	4, 838	90, 653	10, 235	50, 000	16, 000
1934	85, 572	4, 408	89, 980	6, 811	50, 000	7, 500
1935	84, 634	1, 589	86, 223	5, 839	50, 000	5, 800
1936	87, 234	2, 041	89, 275	6, 699	50, 000	8, 100
1937	93, 225	2, 023	95, 248	11, 434	50, 000	11, 500
1938	94, 670	1, 726	96, 396	9, 393	50, 000	9, 000

NOTE.—The total income from carrier property for the sixteen-year period, 1923 to 1938, was \$189,624,000. This income is net after deduction for depreciation, which amounted to \$47,768,000 at the end of 1938, or slightly over 50% of the gross investment in carrier property at that time. The total income from the carrier property from 1923 to 1938 represents an average rate of return of 15.9% for the period. The base used in calculating this average rate of return was total investments in carrier property (without deduction for depreciation), plus current assets. Dividends paid during the period 1923 to 1938 amounted to \$192,500,000. It should be noted that the results of operation from 1913 to 1922, inclusive, are not included as data for these years are not available.

EXHIBIT No. 1328

No. 8928

MRS. NELLIE POLLARD DAILEY ET AL., APPELLANTS, VS. RAILROAD COMMISSION OF TEXAS ET AL., APPELLEES

FROM DISTRICT COURT, TRAVIS COUNTY

This is a Rule 37 case. It arose as follows: In April, 1919, O. H. Pollard acquired title to the 20-acre tract of land in question by deed, which land is in what is now the Old Ocean Field, in Brazoria County. Appellants are the children, heirs and present owners of the 20-acre tract of land. O. H. Pollard acquired the land some seven months before the first so-called state-wide 150-300 feet oil well spacing rule was promulgated by the Commission, and some fifteen years before the first producing well was brought in in the Old Ocean Field, in 1934. On October 28, 1937, the Commission promulgated the following special Rule 37 applicable to the Old Ocean Field:

"No well for oil or gas shall hereafter be drilled nearer than thirteen hundred and twenty (1320) feet to any other completed or drilling well on the same or adjoining tract or farm, and no well shall be drilled nearer than six hundred and sixty (660) feet to any property line, lease line, or subdivision line; provided that the Commission, in order to prevent waste or to prevent the confiscation of property, will grant exceptions to permit drilling within shorter distances than above prescribed whenever the Commission shall determine that such exceptions are necessary either to prevent waste or to prevent confiscation of property."

On May 17, 1938, appellants filed with the Commission an application to drill one oil well on the 20-acre tract, under the exception to the Rule to prevent confiscation of property, which after notice and hearing was denied by the Commission; and on appeal to the trial court the Commission's order was sustained; hence this appeal.

Under the facts stated the land owners were as a matter of law entitled to drill one well on the 20-acre tract, and the Commission acted arbitrarily and unreasonably in denying the permit. The exceptions to prevent waste or to prevent confiscation as used in the special rule applicable to the Old Ocean Field are the same as have been provided for in each and every Rule 37 promulgated by the Commission. In the case of *Railroad Commission v. Magnolia Petroleum Co.*, 109 S. W. (2d) 967, the Supreme Court construed a similar Rule 37 and its exceptions as follows:

"By its language the rule is cast into two distinct parts. The first deals with a spacing pattern for the entire field and for wells generally; the second, with specific wells, to be drilled as exceptions to the general rule. These two parts compose the entire rule, the one as much as the other, and must be construed together."

See also *Gulf Land Co. v. Atlantic Ref. Co.* (Sup. Ct.) 131 S. W. (2d) 73.

This court had occasion to pass upon the exact question here presented in the cases of *Nash v. Shell Petroleum Corp.*, 120 S. W. (2d) 522; *Shell Petroleum Corp. v. Railroad Commission*, 116 S. W. (2d) 439; and *Stanolind Oil & Gas Co. v. Railroad Commission*, 96 S. W. (2d) 664; holding in the *Nash* case that:

"One of the main purposes of this exception was to protect the vested right of capture of owners of tracts so small or of such irregular shape as to preclude development under the general rule. The Commission has uniformly given this exception this construction, so far as we have been able to determine. * * * Whether the Commission had the power to omit the exception altogether, and apply the general rule to all tracts too small or of too irregular shape to develop under the rule, regardless of the date of the subdivision, does not now concern us. The Commission did authorize the exception. That it had the power to do so has never been seriously questioned; but, on the contrary, has been uniformly recognized. Having made the exception, we have reached the conclusion that it did not have the power to limit it to subdivisions antedating the rule.

It has been the uniform holding of this court that the inherent right of the landowner to recover the oil beneath his land is the primary basis for the exception to prevent confiscation or to protect vested rights, and that such right is deemed to outweigh other consideration for which the rule was promulgated. The Supreme Court so construed the rule and its exceptions in the case of *Brown v. Humble Oil & Refining Co.*, 83 S. W. (2d) 935, holding that the exception to protect vested rights must be construed in connection with the rules of property in oil and gas; that each owner must have a fair opportunity to recover his oil through wells located on his land; that the exercise of the police power under Rule 37 and its exceptions does not change the rule of property, but merely regulates and controls the manner of its use and enjoyment; and that the primary rule of ownership of property is still operative. And both the courts and the Commission, until the instant case, have uniformly held that since the Commission made the exception to prevent confiscation or to protect vested rights, it must apply such exception where a person owns a tract of land too small or irregular in shape to be drilled under the general spacing provision of the rule, no question of voluntary subdivision arising; and to permit the drilling of at least one well which the landowner is entitled to drill as a matter of law.

Appellees *Harrison Oil Company* and *J. S. Abercrombie Company* seek to justify the action of the Commission in denying the permit to drill the well in question upon the ground that they offered to pool appellants' property with adjoining acreage, alleging that under such arrangement appellants would obtain all their oil, and in consequence their vested rights to the oil would be protected. If it be assumed that the conservation statutes authorize the Commission to require pooling of acreage and that such pooling is not inhibited by the fundamental laws of both the state and the nation, upon which question we do not pass, a complete answer to the pooling contention is that the spacing rule in question does not provide for the pooling of lands, but provides that the Commission will by exception protect the vested rights of the owner of small or irregular tracts of

land by permitting closer drilling than the general spacing distances prescribed in the rule. The Commission cannot arbitrarily require any pooling of acreage where it has no rule or regulation prescribing and defining pooling. The pooling of lands would necessarily curtail the owners' free use and enjoyment of them, and would therefore necessarily require that pooling must be defined with such reasonable certainty as the subject-matter dealt with will admit of; and, when so defined, the pooling rule or regulation becomes the guide or criterion governing the Commission in passing upon any application to require pooling. Manifestly, the fundamental law of both the state and the nation would not permit the Commission to determine on the spot such far reaching limitation of the right or use of private property, but would require that such matters shall be controlled by due process of law and freedom of contract. And having promulgated the special spacing rule in question providing for an exception to protect private rights in the use of property, the Commission cannot refuse to apply that exception where, as in the instant case, the facts require its application.

But appellees contend that the Commission had the discretionary power to refuse the permit upon the ground that because of a very high and dangerous gas or reservoir pressure the drilling of the well would cause great danger, and would cause waste resulting from the drilling of the well. The first producing well was brought in in 1934, and the wider or 40-acre spacing rule was not promulgated until some three years later, in 1937. The wider spacing rule was predicated upon the highly dangerous reservoir pressure; but it nevertheless provided for an exception to protect vested rights or to prevent confiscation. Having made the exception, the Commission does not have the right to limit the exception so as to nullify it. This the Commission has done, if it did do so, by refusing to apply it because of the highly dangerous gas or reservoir pressure prevailing throughout the entire field. The exceptions to prevent waste and to prevent confiscation of property are a part of the Rule 37 in question, "the one as much as the other, and must be construed together." *Railroad Commission v. Magnolia Petroleum Co.* (Conn. App.) 109 S. W. (2d) 967; *Gulf Land Co. v. Atlantic* (Sup. Ct.) 131 S. W. (2d) 73. The Commission cannot promulgate a rule or exception to it, and then refuse to apply the rule or exception under a state of facts which would destroy the rule or exception. *Brown v. Humble Oil & Refining Co.*, supra. If the hazards or dangers existed, the Commission should not have provided for an exception; but as to its statutory or constitutional right to do so we do not pass. Such question is not here presented because the Commission made the exception to the rule, and must apply it where applicable.

Appellee Harrison Oil Company and J. S. Abercrombie Company seek to dismiss this cause upon the ground of lack of interested and, in the alternative, of necessary parties. The basis of this contention is that the appellants had executed an oil and gas lease covering the 20-acre tract, "which was outstanding, and appellants had no right to enter upon the possession of the land in controversy or drill a well thereon and therefore showed no right to any permit in any event; and in the alternative, if any right could issue, said cause should be dismissed for lack of necessary parties in that the title claimed by appellants at the time of the trial was outstanding and appellants show no right to sue."

Appellees have not briefed this counter-proposition, and do not show that the matters were urged in the trial court. In any event, the contention is without merit.

The lease was not executed until after appellants' application to drill the well had been denied by the Commission. The case was tried on amended pleadings, which do not show if this suit were filed before the execution of the lease. Appellants were the fee owners of the land and the royalty owners under the lease. Under these facts they were interested parties and affected by the order denying the well. Section 8 of Art. 6049c, R. S., provides that "any interested person" affected by any rule or regulation of the Commission made or promulgated under the conservation laws shall have the right to appeal to the courts to review unjust and unreasonable action.

In accordance with our above conclusion, we reverse the judgment of the trial court and remand the cause with instruction to the trial court to grant the ancillary injunctive relief as prayed for by appellants.

M. B. BLAIR,
Associate Justice.

Reversed and Remanded.
Filed: October 18, 1939.

SUPPLEMENTAL DATA

The following documents are included at this point in connection with testimony on p. 9580, supra.

EXECUTIVE OFFICE OF THE PRESIDENT,
NATIONAL RESOURCES PLANNING BOARD,
Washington, October 24, 1939.

Hon. JOSEPH C. O'MAHONEY,
Chairman, Temporary National Economic Committee,
Senate Office Building, Washington, D. C.

MY DEAR SENATOR O'MAHONEY: You will recall that at the meeting of your Committee on Friday morning, October 20, Mr. Willis J. Ballinger, representative of the Federal Trade Commission, challenged my earlier observation that the cost of producing liquid fuels from coal and shale would be four or five times greater than present costs from natural reservoir petroleum. Mr. Ballinger read into the record an excerpt from the 1934 Petroleum Investigation purporting to show that gasoline can be produced from coal at a figure approximately twice the cost of producing gasoline from petroleum.

I have asked Dr. Arno C. Fieldner, Chief of the Technologic Branch of the Bureau of Mines, to give me his comments on the comparative costs involved, which he has done in his attached letter of October 21. You will note that Doctor Fieldner concludes that the cost of producing gasoline from coal in the United States would be approximately four times the present cost of making gasoline from petroleum at the refinery. He points out also that the cost of producing gasoline from oil shale would probably be of about the same order as the cost of making gasoline from coal, but that there would be an additional disadvantage in that oil shale deposits are remote from market centers.

It will be appreciated if you will have this letter, as well as Doctor Fieldner's letter to me, inserted in the record.

Sincerely yours,

RALPH J. WATKINS,
Economic Adviser.

Enclosure.

UNITED STATES DEPARTMENT OF THE INTERIOR,
BUREAU OF MINES,
Washington, October 21, 1939.

Subject: Relative Cost of Gasoline Made from Petroleum, Coal, or Oil Shale.

Dr. RALPH J. WATKINS,
National Resources Planning Board,
Room 6119, North Interior Building, Washington, D. C.

DEAR DOCTOR WATKINS: The October 19, 1939, number of the Oil and Gas Journal on page 118 gives a chart showing the refinery prices of regular U. S. motor gasoline. For 1938 these prices ranged from 4.4 cents to about 5.6 cents per gallon. In 1939 the prices started off in January at about 4.4 cents per gallon and have gradually increased to about 5.2 cents per gallon, in September and October. This is a refinery price. Presumably the production cost is slightly lower.

No definite figures of this character are available with respect to making gasoline from coal or oil shale. A few years ago Imperial Chemical Industries of Great Britain estimated on the basis of a small experimental plant that they would be able to make gasoline from coal at a cost of about 12 cents per U. S. gallon.

These are the American equivalents for the original British figures given in Imperial gallons and pence. After completion and operation of the large commercial plant of Imperial Chemical Industries at Billingham it appeared that the costs were considerably higher than the estimates.

The best report on this subject is that of the Subcommittee on Oil from Coal of the Committee of Imperial Defense, issued in February, 1938. This report is commonly known as the Falmouth report after Viscount Falmouth, the chairman of the subcommittee. Another important contribution on European costs of synthetic motor fuel is an article by Gustav Egloff, "Motor Fuel Economy of

Europe," Industrial and Engineering Chemistry, volume 30, 1938, pages 1091-1104. Egloff quotes from the Falmouth Subcommittee report and also the report of the Labor Party, entitled "Labor Plans for Oil from Coal," and from other sources of information. The Falmouth committee report on costs was prepared after considerable consultation with Imperial Chemical Industries so that their estimates should have some basis of fact. They give two sets of figures, one based on depreciating the plant in 20 years and the other on depreciating it in 10 years. On these bases the cost per U. S. gallon would be about 15.6 cents if a plant is written off in 20 years and about 19 cents if it is written off in 10 years.

The British Labor Party report estimates the cost of making gasoline by the hydrogenation of coal at the present time at about 18 cents per U. S. gallon.

On the basis of these various reports and from his information from other sources, Doctor Egloff is of the opinion that for European conditions the cost per U. S. gallon of gasoline produced by either the hydrogenation of coal or carbon monoxide (Fischer process) is about 18 cents; for American conditions assuming the application of the same degree of engineering skill that has characterized the American petroleum industry the cost might be reduced to 16 cents a gallon or less. From my own review of various published reports it would seem that application of present-day knowledge of Imperial Chemical Industries and the German I-G to American conditions probably would make it possible to produce gasoline at a cost at the plant ranging from somewhere between 16 and 20 cents per U. S. gallon. This would be approximately four times the present cost of making gasoline from petroleum at the refinery.

Costs of producing gasoline from oil shale probably would be of about the same order as the cost of making gasoline from coal, but it suffers an additional disadvantage in that the oil shale deposits are more remote from centers of population than are the coal deposits.

Cordially yours,

(Signed.) A. C. FIELDNER,
Chief, Technologic Branch.

The following letter is included at this point in connection with testimony on p. 9790, supra.

W. S. FARISH

30 Rockefeller Plaza, New York

MAY 6, 1940.

MR. JAMES R. BRACKETT,

*Executive Secretary, Temporary National Economic Committee,
Washington, D. C.*

DEAR SIR: While testifying on October 25, 1939, before the Temporary National Economic Committee, I observed that the Robinson-Patman Act needs to be clarified in several respects. At the conclusion of an ensuing colloquy with the Chairman I expressed my willingness to file with the Committee a statement suggesting some of the changes which I think would be helpful.

In the first place, there are a number of uncertainties in the present language of the statute as it now stands on the books. The relation of Sec. 3 to Sec. 2 is not clear. The whole background and history of legislative acts of this type lead me to suppose that the important clause reading "and where the effect of such discrimination may be substantially to lessen competition or tend to create a monopoly in any line of commerce, or to injure, destroy, or prevent competition, etc." appearing in Sec. 2 ought also to govern Sec. 3. In the absence of court interpretation to this effect, I think the Act ought to be amended to make it clear that the above-cited clause does govern both sections. Otherwise, the first clause of Sec. 3 is an exceedingly drastic prohibition of price variations and, as such, has the effect, in my opinion, of discouraging price competition.

I am also troubled somewhat by the concept "injure, destroy, or prevent competition with any person." I think I understand the preceding phrase, "substantially to lessen competition or tend to create a monopoly in any line of commerce"; but from a business standpoint I am unable to guess what business practices might fall under the ban of this concept of "injury to competition." Knowing something of the background of the Act, I suspect that the business groups which strongly advocated this statute really had in mind the concept of

injury to competitors. And such an interpretation, of course, raises the question as to whether the ideal of competition itself does not frequently imply something closely akin to injury to individual competitors. Also, as other commentators have pointed out, the phraseology "with any person who either grants or knowingly receives the benefit of such discrimination, or with customers of either of them" is difficult to interpret.

Another interpretation which bothers businessmen arises from Sec. 2 (b). The Robinson-Patman Act and the Clayton Act, of which it is a part, authorizes the Federal Trade Commission to issue orders terminating prohibited discriminations. Certain persons injured are permitted to sue for amounts equal to three times the damages they have sustained through violations. Sec. 2 (b) provides that upon proof being made that there has been discrimination in price the burden of rebutting the prima facie case thus made by showing justification shall be upon the person charged with the violation and unless justification shall be affirmatively shown the Federal Trade Commission is authorized to issue an order terminating the discrimination. The section then provides that nothing in the Act shall prevent a seller rebutting the prima facie case thus made by showing that his lower price was made in good faith to meet an equally low price of a competitor. It is clear, I think, that proof that one's price was made in good faith to meet competition is a good defense against a Federal Trade Commission complaint. It is not clear that proof that one's price was made in good faith to meet competition is a defense against a private suit for triple damages. The Act ought to be amended to establish that if a price was made in good faith to meet an equally low price of a competitor it is a defense against any proceeding or remedy authorized by the Act.

A further difficulty of interpretation appears in Sec. 2 (b) and (e), which make it unlawful for any person to discriminate between purchasers by furnishing any services or facilities to purchasers unless the services or facilities are accorded to all purchasers on proportionately equal terms. It has been the practice of the petroleum industry for many years to lend to retailers pumps and underground storage tanks. The Supreme Court has determined that this practice is not an unfair trade practice. It is impossible to determine from the mentioned provision of the Act whether a violation results from lending a small retailer exactly the same pump and tank facilities that are lent to a larger retailer. Similarly, advertising helps in the forms of signs, window displays, and the like, are often lent to retailers. It is impossible to determine whether the mentioned provision of the Act requiring services or facilities to be accorded to all purchasers on proportionately equal terms is violated by furnishing advertising displays in like quantity to all retailers. Perhaps the Act requires the furnishing of twice as much of the physical aids and facilities to the retailer who purchases twice the quantity of products. The Act should be amended to define more closely the meaning of the phrase "proportionately equal terms."

Turning from these matters of interpretation to some more general criticisms, I am troubled by the effort which this Act makes to establish cost as the principal yardstick for price differences. I do not think that this concept of price is thoroughly in accord with the realities of a genuinely competitive system of enterprise. The idea that prices should be built up from costs plus fair profits ignores demand factors and market considerations. The economists tell us that in the short run cost does not have the determining influence on prices. This view is confirmed daily in our business when pressure of competitors, keen bargaining on the part of customers, and shifts in demand and supply cause prices that are unlikely always to accord with prices determined by the method of cost plus fair profits. In addition to this somewhat abstract argument there is the practical consideration that cost accounting is not nearly so exact a science as legislators currently suppose it to be; and a company such as ours, with a variety of products going to consumers through varied channels of distribution, faces an impossible task if it is required to justify all price differentiations on a cost basis. For both these reasons, it seems to me that the phraseology "differentials which make only due allowance for differences in the cost of manufacture, sale, or delivery resulting from the differing methods or quantities, and so forth" might well be amended along the lines suggested by Professor McNair of the Harvard Business School in "Marketing Functions and Costs and the Robinson-Patman Act."¹ His suggested phraseology is as follows:

"* * * where the effect of such discrimination may be substantially to lessen competition, to tend to create a monopoly in any line of commerce, or substantially to disable, destroy, or prevent competition between the seller and his competitors

¹ *Law and Contemporary Problems*, June, 1937.

or 'tween and among the customers of the said seller and their competitors, and either where such commodities are of like grade, quality, and quantity, or where the discrimination in price is excessive in that it is grossly out of proportion to the differences in grade, quality, or quantity put forward as the basis of such discrimination and not justified by the probable saving or other advantage to the seller resulting from differences in the grade, quality, or quantity, or method of sale or manufacture in any given case: Provided, that in determining quantities reference may be had to total quantities purchased during a season or other reasonable unit of time, and consideration need not be limited to single transactions."

Another situation in which cost is not a good criterion of the validity of price differentials arises where customers perform different marketing functions. In general, if one type of wholesaler performs more extensive marketing functions than another type of wholesaler, it may be supposed that the first type of wholesaler is relieving the manufacturer of certain costs which the latter still incurs in selling to the second type of wholesaler. Yet as regards individual transactions or individual lots of merchandise, it may be very difficult to trace these cost differences. Consequently, it seems to me that the differences in functions performed by the buyers ought to be accepted as a basis of price differentiation without insisting that the differentiation be related to proved differences in cost for the manufacturer in regard to individual transactions or individual lots of merchandise. Otherwise, I think it becomes difficult to pass savings along to the public. The costs go with the functions. Recombinations of the functions may be instrumental in reducing costs. But if discounts and other price differentials are allowed to become frozen in an institutional pattern (whereby one wholesaler, no matter what functions he performs, must be charged the same price as another concern also designated as a wholesaler though actually performing quite different functions, unless the manufacturer can demonstrate differences in his costs of selling to the two firms), then particular existing types of enterprise are given vested interests and a serious obstacle is created to rearrangements of business functions which might have the effect of producing savings for the ultimate consumer. To take an extreme example, it is manifestly unsound to classify as a retailer a chain of filling stations maintaining its own bulk storage installations, and to insist that such an organization should not receive a lower price than an individually owned and operated filling station.

Finally, I must express the feeling that the Robinson-Patman Act as a whole is basically inimical to price competition. In the abstract, I grant that price discrimination often appears to be an injustice, but secret price concessions, inside deals, and other differentiations in favor of good bargainers are part and parcel of price competition. Maybe this ought to not be true in an ideal world; but nevertheless I think these are the facts of the actual world. Such evils as may arise from price discrimination are, in my opinion, less serious than the dangers to the competitive system which proceed from a rigid price stratification. And it is my opinion that the Robinson-Patman Act represents a serious trend toward price rigidity.

Very truly yours,

W. S. FARISH.

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